In the United States District Court for the Western District of Arkansas

Hot Springs National Park 189 v. 100th Anniversary HA-20-4-21

By Anthony J. Sanders
Hospitals & Asylums

Amend the creation myth of the National Park Service in 16USC§1a-1 (2013 restored) and 54USC§100101(b)(1)(A) from 'Yellowstone National Park in 1872' to 'Hot Springs Reservation in 1832 to provide free baths for the indigent' pursuant to 16USC§361 *et seq*. and repeal 16USC§374 to prevent arbitrary or capricious enforcement against everyone 'indigent' and the unconstitutionally vague and outdated prohibition of drumming (for support) pursuant to *Citizens to Preserve Overton Park, Inc.* v. *Volpe*, 401 U. S. 402, 410 (1971) and *Grayned v. City of Rockford* 408 US 104 (1972). .

Restore National Park Service statute the Organic Act under 16USC§1 to §18f-3 to the condition it was in 2013 before the passage National Park Service and Related Organizations Act Pub. L. 113–287, § 3, Dec. 19, 2014, 128 Stat. 3096, to create a common law with 54USC§100101 *et seq*. - no litter, no civil eviction of free camps that conserve the scenery and the natural and historic objects and the wild life therein, in such a manner as will leave them unimpaired for the enjoyment of future generations under 16USC§1 (2013) and 54USC§100101(a).

Transfer the protection of individual right to bear arms at 16USC§1a-7b to the end of the chapter on obstruction of lawful hunt at 16USC§5208 to lay down arms under common Art. 3 of the Geneva Convention (1949) whereas this law pertaining to the National Wildlife Refuges interferes with the territorial integrity of the National Park Service in flagrant disregard for the principle of non-use of force, under Art. 2(4) of the UN Charter pursuant to Military and Paramilitary Activities in and against Nicaragua (*Nicaragua v. United States of America*) Judgment No. 70 (1986).

Sell the rehabilitated Army and Navy General Hospital at Hot Springs to Housing and Urban Development Public and Indian Housing Program for $1 to afford renovations in behalf of the homeless, destroy the property that is dangerous to public health or safety between the hospital and Ranger station under 40USC§102 and re-establish promised free bath(s) and new Olympic size "pool", that is not too hot or too cold to bathe in the winter outdoors under 40USC§101(1) and 16USC§361 at the cost of +/-$10 million to the US Army and supervision of General Services Administration under Sec. 7 of PL 86-323 of 21 September 1959, 24USC§18 and §20.

Amend federal torture statute to comply with Arts. 2, 4 and 14 of the CAT (1987) by repealing the phrase “outside the United States” (tampered in 2009) from 18USC§2340A(a) and Exclusive Remedies at 18USC§2340B to: The legal system shall ensure that the victim of an act of torture obtains redress and has an enforceable right to fair and adequate compensation, including the means for as full rehabilitation as possible. In the event of the death of the victim as a result of an act of torture, their dependents shall be entitled to compensation under Art. 14 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) (1987).

Contract a Hot Springs National Park trail crew with the City to swiftly complete the (bike) path along Hot Springs Creek to Hamilton Lake and connect the Sunset Trail to Ouachita National Recreational Scenic Trail to perfect *bona fide* claims to end the Trail of Tears under 16USC§1245 and 24USC§153.

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Hospitals & Asylums (HA) has been published yearly, equinox and solstice since 2000, online since 2004, pursuant to the recovery of extra service pay from negligence, false arrest and severe illness in *US v. Thomas Fillebrown, Secretary of Commissioners of Navy Hospitals* 32 US 28 7 Pet. 28 (1833) as cited by]Justice Story in *Minis v. US* 40 U.S. 423 (1841) after the War of 1812 obstructed the Naval Hospital Act of 26 February 1811. The United States Sailors' home was opened in 1833 in Philadelphia and Soldiers' Home enacted in 1851. The Army and Navy Hospital at Hot Springs, Arkansas was enacted 30 June 1882, 50 years after Hot Springs Reservation, the true first national park, was set aside on 20 April 1832. St. Elizabeth's Hospital was opened in 1855 until it was completely closed in 2010. Freemen's Hospital & Asylum was founded in 1862 to provide medical treatment for former slaves and care for aged and disabled black patients. National Cemeteries were enacted 17 July 1862. The Columbia Institution for the Deaf was enacted in 1864. The National Asylum, was enacted in 1865 and changed its name to National Home for Disabled Volunteer Soldiers in 1873, it grew from three to ten facilities before being consolidated with the Bureau of Pensions and National Cemetery Administration by the Veterans Administration in 1930. The Tubercular Hospital at Fort Bayard, New Mexico was enacted in 1907 after being transferred to the Surgeon General in 1900 from the Army Post that had garrisoned the African-American Buffalo Soldiers since 1866. The first edition of the United States Code was published in 1926. In 1928 Ancon Hospital in Panama was renamed Gorgas Hospital. In 1960 the law provided for the hospitalization of mentally ill national returned from foreign countries. Of the National Asylums only the Armed Forces Retirement Home in Washington DC and Battle Mountain Sanitarium Reserve in South Dakota continue to operate under the statute. HA's second edition full-length medical textbook is currently the only downloadable online version available to teach this art to those who desire to learn it, without fee and written covenant, in order to use remedies for the benefit of the ill and keep them from harm and injustice pursuant to the

Hippocratic Oath HA-17-3-21.

It seems best for the judge to assume Sanders, Tony J. is done. It remains for the magistrate to see if the Superintendent of Hot Springs National Park *plaintiff*, General Services Administration, Secretary of Housing and Urban Development, Advisory Council on Historical Preservation and US Army respond within 30 days to the summons of 20 April for the occasion of the 189th anniversary of Hot Springs Reservation or on 20 May a default judgment shall be ruled against Hospitals & Asylums (HA), District Court and probably appearing plaintiff, being party to the negligent abandonment of the Army and Navy Hospital we seek competent federal authorities to renovate under Rule 2 & 4 Fed. Civ. P., 24USC§18 and §20. Whereas no-one responded to HA's suicide note, there seems to be no alternative but for Housing and Urban Development to fine Hot Springs National Park $10 million for the renovation of the rehabilitated Army and Navy Hospital, asbestos abatement, demolition of the derelict buildings, soil abatement, construction of an Olympic size swimming pool and hot tubs to provide the long promised free bath,connecting trails to Lake Hamilton and Ouachita National Scenic Trail to complete the Trail of Tears, and $500,000 plus 3% inflation every year thereafter for the park to operate and maintain the pools, for the heinous, USDA offending, national park police crime of aggravated identity theft under 18USC§1028A. The District Judge may grant the Interior Secretary leave to appeal the unauthorized disbursement of energy revenues to states pursuant to 28USC§2349 - $2 billion in energy payments were never authorized to be distributed, by the prior plump administration oil lobbyist Secretary, not including Alaska, under Sec. 20001(b)(5) of the Tax Cuts and Jobs Act (TCJA) of 2017 (P .L . 115-97, Dec. 22). No one else has any money that isn't counterfeited by HA until the US dollar is devaluated by the Treasury pursuant to the Marshal Lerner Condition under 19USC§4421, 22USC§5301 *et seq*. and 2020 Revised estimates: effect of changes in rates of exchange and inflation Report of the Secretary-General A/74/585 of 11 December 2019.

The Army and Navy General Hospital District was listed on the National Register of Historic Place on 9 February 2007 pursuant to the National Historic Preservation Act of 1966 under 16USC§470 *et seq*. The Keeper of the National Register will conduct an annual review of the condition of properties determined eligible for the National Register with information provided by the Advisory Council on Historic Preservation pursuant to 36CFR§63.6. Federal agencies undertaking a project having an effect on a listed or eligible property must provide the Advisory Council on Historic Preservation a reasonable opportunity to comment in accordance with Section 106 process of the National Historic Preservation Act of 1966 under 36CFR§60.2(a) and §800.1 *et seq*. Favorable tax treatments are allowed for rehabilitation, and discourage destruction of historic buildings by eliminating certain otherwise available Federal tax provisions both for demolition of historic structures and for new construction on the site of demolished historic buildings §60.2(c) and §67.5. The National Historic Preservation Fund provides grant-in-aid for preservation, rehabilitation, restoration and reconstruction under §68.1 for state and local governments under §61.1.

Title X of the National Parks and Recreation Act of 1978, Public Law 95-625 provides Federal grants to economically hard-pressed communities specifically for the rehabilitation of critically needed recreation areas and facilities, and for the development of improved recreation services under 16USC§2501-2514. Abandoned property shall be disposed of by the park superintendent under 36CFR§2.22. The proposal is to preserve and rehabilitate and occupy the Army and Navy General Hospital and Nursing Building, Ranger Station and Forestry Laboratory, controversially demolish all the other buildings in order to restore parklike conditions and reconstruct free bathing for the indigent, with a large, possibly Olympic size, naturally heated, swimming pool and hot tubs pursuant to the

Secretary of Interior's Standards for the Treatment of Historic Properties under §68.3. Native Americans told white settlers no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs (Paige & Harrison '87: 22)(Scully '66: 5-6).

This lawsuit is done *ex aequo et bono* to celebrate the 100th anniversary of Hot Springs National Park for the occasion of the 189th anniversary of the act that reserved the hot springs together with four sections of land surrounding the springs for the future disposal of the United States on 20 April 1832 (4 Stat. 505) and 139th anniversary of the act that created the Army and Navy Hospital there on 30 June 1882 (22 Stat. 121). Because Hot Springs National Park is so small and the bathhouses and condemned buildings at the Army and Navy General Hospital complex are so large, the semantics of changing the official first national park to Hot Springs National Park, is best treated as being conditional on the occupation of the abandoned, rehabilitated Army and Navy Hospital, demolition of the condemned buildings, and all important construction of a large naturally heated swimming pool there to provide the long promised 'free baths for the indigent' that are not too hot or too cold to bathe in the winter. Native Americans told white settlers no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs (Paige & Harrison '87: 22)(Scully '66: 5-6). Although the intent of the legislature in creating Hot Springs Reservation was specifically to provide free baths for the sick and indigent it was signed by Andrew Jackson in 1832 in behalf of the United States, omitting reference to the charming and racially non-discriminatory term 'indigent', that must not be used to deprive anyone of their right to bathe for free in the medicinal waters of the hot springs, unadvertised in the land grab and thousands of Native Americans died on the Trail Tears, the southernmost section of which passed a couple days journey to the north (Wallace '11). By the 1880s all open hot springs had either dried up or been covered over to prevent their pollution (Paige & Harrison '87: 47)(Cron '46: 220-264). There is currently one outdoor fountain, but it is too hot to bathe in. In summary, for Hot Springs National Park to be recognized by Congress as the first national park, with an easily emulated lesson in conservation of land and water for the enjoyment of future generations, it is absolutely essential to provide everyone with a free outdoor bath, in a parklike setting, that is not too hot or too cold to bathe in the winter.

Before allegedly committing suicide on 27 February 2021, when the pipes had frozen and flooding had caused damage to the unheated Army and Navy General Hospital, retired estate attorney Clay Farrar, who chaired the Committee on the Future of the Army and Navy Hospital on behalf of the Greater Hot Springs Chamber of Commerce held, “the deed conveying the property from the Army to the state in 1960, and the enabling 1959 act of Congress, stipulated that the campus would immediately revert to the Army if the secretary of the Army determined it was no longer being used for health or education” (Farrar '19) and is now to be disposed of under 24USC§420. Sec. 7 of PL 86-324-Sept. 21, 1959 provides: In the event the State of Arkansas does not accept the conveyance authorized by this Act on or before June 30, 1960, the Secretary of the Army shall thereafter report to the Administrator of the General Services Administration as excess property pursuant to the provisions of the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), all the lands and improvements thereon comprising the Army and Navy General Hospital, Hot Springs National Park, Arkansas, and said lands and improvements thereon shall cease to be a part of the Hot Springs National Park, Arkansas. Care and handling is defined to include ...converting rehabilitated Army and Navy General Hospital (to public housing or other use), destroying the property that is dangerous to public health or safety under 40USC§102 and establishment of promised "pools" under 40USC§101(1).

Due to lead, asbestos and dilapidation, it is medically necessary to thoroughly demolish the buildings between the Army and Navy General Hospital and Ranger Station pursuant to lead based paint

poisoning reduction in 24CFRPart 35, protection and enhancement of environmental quality 24CFR Part 50 and environmental criteria in 24CFR Part 51. Falling overhead objects are the leading cause of death in forestry workers and the condemned buildings around the Army and Navy Hospital could collapse at anytime so homeless people and curiosity seekers are prohibited from entering them, ostensibly to prevent vandalism. Exposure to high levels of lead may cause anemia, weakness, and kidney and brain damage. Very high lead exposure can cause death. Lead can cross the placental barrier, which means pregnant women who are exposed to lead also expose their unborn child. Lead can damage a developing baby's nervous system. Although there are no regulations specifically pertaining to the demolition of lead based paint contaminated structures, demolition does pose a lead based air contamination hazard, and removal and disposal of the debris requires consideration, it will be necessary to contract with an EPA certified lead hazard inspector before beginning and after completing to determine if there is any soil-lead contamination when the play area is finished under 40CFR§745.227(h)(4) and abate any soil contamination under (e)(7).

Asbestos abatement workers should be non-smokers and use the highest level of protective gear for themselves and others. Three of the major health effects associated with asbestos exposure are lung cancer, mesothelioma, and asbestosis. Although treatment of lung cancer is improving, mostly in regards to the early treatment aspergillosis with corticosteroids, or to abate aflatoxin induced carcinogenesis, mesothelioma is invariably fatal. Although attributed to reductions in smoking, most of the reduction in lung cancer over the past few decades is probably due to reductions in lifetime environmental asbestos exposure. Cigarette smokers have at least a 10 times greater risk of developing lung cancer than do nonsmokers. Asbestos exposure and cigarette smoking act synergistically; an asbestos worker who smokes has a 50-100-fold increased chance of developing lung cancer (Mitchell '89: 340-344). Air toxics regulations under the Clean Air Act specify work practices for asbestos to be followed during demolitions and renovations. The regulations require a thorough inspection where the demolition or renovation operation will occur. The regulations require the owner or the operator of the renovation or demolition operation to notify EPA Administrator at least 10 days in advance, and/or the appropriate delegated entity (often a state agency) before any demolition of buildings that contain a certain threshold amount of regulated asbestos-containing material. Work practice standards must control asbestos emissions. It is required that all asbestos-containing materials must be removed before demolition, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable. These work practice standards are designed to minimize the release of asbestos fibers during building demolition or renovation, waste packaging, transportation and disposal. The rule generally requires that asbestos-containing waste material from stripping and removing abatement operations be sealed in a leak-tight container while wet, labeled, and disposed of properly in a landfill qualified to receive asbestos waste under 40CFR§61.145.

Demolition costs are subject to many, many factors that make them vary from as little as $2 to $17 per square foot. In general, completely demolishing a home alone costs between $4,000 and $14,000. Adding in a foundation raise or demolition can increase that number by $1,000 to $5,000, depending on whether it’s a basement or a slab, and factors such as asbestos and lead paint can add even more - upwards of $20,000 if the entire building needs asbestos abatement. The top factors that influence the cost of a home demolition include: The size of a structure, the foundation type and whether it needs to be demolished during the course of the project, the materials used to build the home - brick is harder to demolish than wood., the cost of permits and removal of hazards such as asbestos and lead paint and debris removal. The average cost to demolish a commercial building is between $4 and $8 per square

foot. Keep in mind that this cost can go up or go down depending on the square footage. The cost of demolishing a commercial building decreases with increased square footage. Because the slum is so large the law of diminishing returns should reduce the highest possible square foot costs imposed by the need for lead and asbestos abatement. $10 million should be more than enough for the planning, asbestos abatement, demolition, debris disposal, reforestation, residential parking lot, swimming pool construction and trail completion. The remainder could be used to operate and maintain the free swimming pool until grant funding is authorized under 24USC§423(b) and 54USC§302904.

The Administrator of General Services may make contracts and provisions for the preservation, sale, or collection of property, which may have been wrecked, been abandoned, or become derelict under 40USC§1309. Information has been provided by HA pursuant to free office and utilities in the Army and Navy Hospital as exemption from the requirement to pay prevailing wage rates determined under 24CFR§70.1 *et seq*. and 24USC§422. Approval of the prospectus by the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives is necessary because +/-$10 million total expenditures will be over $1.5 million under 40USC§3307 but may be excluded if the President thinks the public housing, recreation, military and veterans history, is in the public interest under 40USC§3301(C)(iv)(vi)(vii)(viii). In general, the agency head shall negotiate a contract for architectural and engineering services at compensation determined to be fair and reasonable under 40USC§1104. A Public Housing Authority (PHA) must obtain written approval from Housing and Urban Development (HUD) before undertaking any transaction involving demolition or disposition under 24CFR§970.7. Public and Indian Housing seems to be the most appropriate agency. Congregate Housing Program costs support human resources but do not cover necessary renovation and appliances under 24CFR§700.115. Modernization, development and demolition are allowed pursuant to a 5-year action plan by the Capital Fund Program (CFP) under 24CFR§905.200.

To expedite financing, it is important to note that the U.S. Army has assumed an obligation to respond to an estimated $10 million pursuant to Sec. 7 of PL 86-323-Sept. 21, 1959. Whereas the State of Arkansas has vacated the rehabilitated Army and Navy Hospital, responsibility for the property has reverted to the US Army, who does not desire to retain the abandoned property either, but may be held liable by Congress for the costs of repairing the property under 40USC§1306(b)(f) and 10USC§7802(b). Justice Story confined admiralty jurisdiction to the high seas and upon rivers as far as the ebb and flow of the tide extended in *The Steamboat Thomas Jefferson* 23 U.S. (10 Wheat.) 428 (1825). Chief Justice Taney overruled the tidal ebb and flow requirement extending jurisdiction over all waters, salt or fresh, tidal or not, which are navigable in fact in *The Genes-see Chief v. Fitzhugh* 53 U.S. (12 How.) 443 (1851). Some of the older cases thought the commerce power furnished the support for congressional legislation in this field, now the District Court must hold Congress liable for deceptively legislating admiralty jurisdiction upon Army liability for damages and Congress responsible for payment in excess of $500,000 under 10USC§7802(b), $1.5 million under 40USC§3307 if the President does not find it the public interest to exclude under 40USC§3301(C)(vii), or HUD CFP pays to clean up the Army's mess from WWII under 24CFR§905.200 *ex aequo et bono*. To appeal to the admiralty jurisdiction of the District Court, the demolition of derelict, lead and asbestos contaminated buildings, other than the rehabilitated Army and Navy Hospital, Ranger Station and Forestry Laboratory, on the 24 acre property and construction of a free, naturally heated, outdoor, Olympic size, public swimming pool is to be construed for the United States to finally compensate for the Trail of Tears and capping over of all open hot springs at the time of construction of the Army and Navy Hospital in the 1880s, 10USC§7801 *et seq*. and Department of Army. Technical Manual.

Swimming Pool Operation and Maintenance. TM-5-662. 28 February 1986.

Before Ral Springs was closed by the first superintendent, as many as 20 people would crowd into the free free spring (Paige & Harrison '87: 47). Although there should be some free hot tubs a large swimming pool seems necessary to provide all visitors with a free bath. Approximately 1.5 million people visited the National Park at Hot Springs, a city with a population of only 36,969, in 2018. There is no entrance fee to the park. There is a free parking garage at 128 Exchange St. The Gulpha Gorge campground is first come first serve, with a 14 day limit. There are 26 miles of trails. The cost of constructing Olympic-size swimming pools is between $300,000 and $500,000. Maintenance costs $250,000 a year in chemicals and utilities alone (Brown '08). With insurance, life guard and other labor it would probably cost $500,000 to construct and $500,000 a year to maintain. Olympic-size pools conform to very strict measurements. They are exactly 50 meters in length, 25 meters wide, contain 10 lanes, two meters deep and contain 2.5 million liters, 660,430 gallons of water. Each lane measures 2.5 meters in width. In the United States a 25 yard pool is used for most competitions. The Hot Springs YMCA has a 25 x 25 meter pool that is about four feet deep and has ten lanes. Although the thought of hosting the Olympics at Hot Springs is grandiose, demand is to provide 4,000 to as many as 10,000 a people, including small children, a free bath, on any given day, and more people could safely bathe in shallow pool, with some lanes only during lap swim times. Diving boards 0-6 ft in height require a depth of 8.5 ft, 6-9 ft in height a depth of 10 ft and higher than 9 feet a depth of 11.5 ft (Army '86: 2-6). Special care would need to be taken to regulate the heat of the water using the natural 143 F Hot Springs water, so that is not too hot or too cold to swim outdoors in the winter. Youth swimming classes, aquatic exercise programs for older patron and winter bathers may prefer water temperatures between 28.3 and 30 C (83 to 86 F), while swim teams prefer water temperatures ranging from 25.5 to 27.7 C (78 to 82 F) (Vore '12).

The waters of Hot Springs have always had a reputation for treating rheumatism, arthritis, paralysis, and neuralgia (Scully '66). Those suffering from consumption most often found that the thermal waters and vapor baths only aggravated their conditions. Some physicians prescribed the thermal water for diseases affecting the heart and brain, and other physicians warned people with heart and brain diseases to avoid the thermal baths (Garnett 1874: 40-41). A differential diagnosis now holds that the moisture is harmful for pneumococcus but “saline” and Hot Springs mineral water beneficial for methicillin resistant Staphylococcus aureus (MRSA) diseases. Human trials are needed to convince the FDA Center for Drug Evaluation and Research (CDER), Coronavirus Products Advisory Committee, Secretary of Health and Human Services and World Health Organization that eucalyptus, lavender and peppermint scented hot tub Epsom salt cures COVID-19 (eucalyptus, lavender or peppermint), human influenza (lavender and eucalyptus is most highly effective) and sterilizes methicillin resistant *Staphylococcus aureus* (MRSA), pursuant to procedures for classifying OTC drugs as generally recognized as safe and effective and not misbranded, and for establishing monographs under 21CFR§330.10 and 42USC§300u. To help prevent suicide and rampage shootings it is important to note that dimethoxymethylamphetamine (DOM), the most intoxicating substance known to mankind, causes a three day panic attack and six month recovery from severe mental illness if not washed off with water. Although not a reliable hygienist when it comes to either coronavirus, best treated by washing the face with peppermint, lavender or eucalyptus soap or MRSA with saline, chlorine or Epsom salt, the Center for Disease Control is correct to state that swimming pools are not a highly contagious environment regarding coronavirus although it poses a threat outside the water. Indeed, face washing (with water) is an important component of oral coronavirus treatment, not to be prohibited in the course of compulsive hand washing with alcohol, that is not any better than water

when it comes to coronavirus. There is therefore neither any medical or terrorist threat obstructing the reopening of any swimming pools. Hot tubs and baths could be used for highly effective eucalyptus, lavender or peppermint Epsom salt treatment targeting coronavirus, influenza and MRSA but the FDA cruelly and unusually prohibits advertisement of these cures, and would need to inform the public that they are participating in human trials. Despite being largely outdoors, Hot Springs National Park and other national parks and trail organizations are hard hit by the coronavirus. To reopen their visitor center Hot Springs National Park is highly advised to inform the public that they are trying to use eucalyptus or lavender scented humidifiers to make the indoor airspace so curative of coronavirus people would not want to wear their optional masks. Although the effectiveness of hot springs minerals at curing MRSA is likely, it remains to be compared with Epsom salt. Public bathhouses are also highly encouraged to try eucalyptus and lavender aromatherapy. Human trials are wanted to convince the FDA to approve eucalyptus, lavender or peppermint to cure the contagious coronavirus "Pinocchio nose" allergic rhinitis untreated by severe illness and death sparing vaccines (Sapeika '63) (Juergens et al '03)(Asif et al '20)(Patne et al '20)(Sharma '20a)(Sharma '20b)(Sanders '20)(Sanders '21) and hot springs minerals, saline, chlorine and Epsom salt at curing methicillin resistant *Staphylococcus aureus* (MRSA), ingested salt is also helpful (Gründling '16).

1. First National Park

This lawsuit is done *ex aequo et bono* to celebrate the 100th anniversary of the change of name of Hot Springs Reservation to Hot Springs National Park for the occasion of the 189th anniversary of the act that reserved the hot springs together with four sections of land surrounding the springs for the future disposal of the United States on 20 April 1832 (4 Stat. 505). Recognizing the Importance of Hot Springs National Park on its 175th Anniversary H. Res. 138 passed by unanimous roll-call vote and was published in Congressional Record Vol. 153, No. 47 on 19 March 2007. It noted that the Act creating the Hot Springs Reservation preceded both the establishment of the Department of the Interior in 1849 and the establishment of Yellowstone National Park as the first national park in 1872. Although recognizing its importance to conservation, five days was not enough time to discover the 'extraneous' material in 16USC§1a-1 (2013 restore) and 54USC§100101(b)(1)(A) (2014 to present) and amend the official first national park from 'Yellowstone National Park in 1872' to 'Hot Springs Reservation in 1832 to provide free baths for the indigent' pursuant to 16USC§361. Hot Springs Reservation was the only national park or reservation mentioned by name in Sec. 2 of the Act to Establish the National Park Service (Organic Act) of 25 August 1916 (39 Stat. 535). Hot Springs Reservation, was not renamed Hot Springs National Park, with the consequential and dubious distinction of being subsequently enumerated the 18th national park, until, without any of the thousands of dollars provided to other national parks: hereafter Hot Springs Reservation shall be known as Hot Springs National Park was legislated by An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1922, and for other purposes of 4 March 1921 (41 Stat. 1407).

Native Americans told white settlers no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs (Paige & Harrison '87: 22)(Scully '66: 5-6). By 1918 the National Park Service was promoting Hot Springs as being the first national park (Parks 1919: 4). It is true, Hot Springs Reservation did not officially change its name to Hot Springs National Park until 1921, wherefore it has subsequently been recognized as the 18th national park, however the distinction between Reservation and National Park in the Organic Act of 1916 is merely semantic. The Act of 4 March 1921 (41 Stat. 1407) did not pay for the name change, and stole 40 years of truth from American history, in this regard. This tort of negligence perpetuates the discrimination against race and disability

imposed by the Trail of Tears that the original well-intended legislation of the Hot Springs in 1832 intended to, but did not substantially, treat, and there are no more outdoor hot springs to bathe in for free without substantial reparation by the United States government. It therefore seems necessary for the United States, to both officially recognize Hot Springs National Park as the official first national park by amending the official first national park from 'Yellowstone National Park in 1872' to 'Hot Springs Reservation in 1832 to provide free baths for the indigent' in 16USC§1a-1 (2013 restore) and 54USC§100101(b)(1)(A) (2014 to present) and pay for the construction, and year-round operation and maintenance of a large, outdoor, swimming pool, naturally heated with waters from the hot springs, to actually provide the long promised free bath to all visitors, whether Native American or more recent immigrant.

Hot Springs locals are highly supportive and enthusiastic about being officially recognized as the first national park. The 2021 Diamond lakes Vacation Guide celebrates a century of Hot Springs National Park. Before Egypt had pyramids ancestors of the native Caddo and Ouachita tribes were already visiting and settling down in the area that would become the Diamond Lakes Region. Named for its rocky, diamond-laden lands and deep, pristine waters, the region is a collage of mountains,water, quaint rural villages and the city of Hot Springs. The region's thermal waters ,were thought to have healing properties and it's one of the main reasons the region thrived in its early days. The actual hot springs around which the park and the town were built and named have been drawing visitors and inspiring legends as long as humans have been here. After Hernando de Soto discovered the springs for the western world on a voyage in 1541, this area and its waters have had international and sometimes mythical significance. Believed to possess healing properties – even considered to be the actual Fountain of Youth – the original springs are still erupting from the ground as 143 degrees as they have for millennia in a place known as Hot Springs National Park (Diamond Lakes '21: 5, 18).

In 2021 the park is celebrating its 100th anniversary, or more depending on who is asked. Even national parks can be sensitive about their ages, but not in the way one would think. Even though the park officially turns 100 this year, local insist it is much older... and they've got a point. A quick online search of what year was Hot Springs National Park founded will yield an answer of 20 April 1832 – 40 years before Yellowstone would claim the title of 'first national park' and way older than a 100-year anniversary would imply. In 1832 – four decades before Yellowstone got the honor – Hot Springs became the first federally reserved land in the U.S. The area technically became the Hot Springs Reservation, as the national parks system did not yet exist. In 1872 Yellowstone would become the first official national park. Though it is the oldest federal land in the national parks system, Hot Springs wouldn't get the actual title until 1921, a century ago this year. When thinking of a national park, one probably imagine rocks, water, trails, maybe some picnic tables, and all that can be found at hot Springs National Park, but that is just the beginning. This one of a kind park contains historical Bathhouse row, a whole block of eight architecturally unique bathhouses built at the turn of the 20th century to offer vacationers a place to soak up the healing powers of the natural springs. Of the original eight, only two of the still function in that capacity. The rest have changed with the times into shops, galleries, offices a boutique hotel, even a brewery. Visitors can fill a container at one of the “jug fountains” around the park and drink the mineral water. Regarding what is in store for the next 100 years, Laura Miller. Hot Springs National Park Superintendent said, “The next hundred years are just a blip on the radar. Out priority is preserving the thermal springs in perpetuity so that future generations can enjoy the benefits and the beauty of the springs.” (Diamond Lakes '21: 18-19).

Signs argue that the hot water at Hot Springs National Park doesn't stink of sulphur like the hot springs

in Yellowstone National Park. However, Hot Springs is comparatively small, urban, and does not provide any of the promised free hot baths for the indigent, nor connect by trail to Ouachita National Forest, Lake and National Recreational Scenic Trail. Both parks have become inaccessible by public transportation. For the sake of equality and non-discrimination between National Parks and Reservations held by the National Park Service, it seems worth mentioning Redwood State and National Park, as its signs advertise in California, where the ID check is free of FBI and racial discrimination in park police employment, but every email to local and tribal government is lethal, is highly advised to change its name to Redwood Reservation, without incurring any aggravating federal identity theft requirement, by amending Redwood National Park to Redwood Reservation in 16USC§79a-§79q. Whereas the terms National Park and Reservation are obviously interchangeable and the distinction meaningless as they pertain to National Park Service lands, the debate as to whether Yellowstone or Hot Springs is the first national park is settled by the fact that Hot Springs Reservation was created in 1832, 40 years before Yellowstone National Park was created in 1872. It seems very important that Congress correct this error they admitted by Recognizing the Importance of Hot Springs National Park on its 175th Anniversary H. Res. 138 passed by unanimous roll-call vote and was published in Congressional Record Vol. 153, No. 47 on 19 March 2007. Going forward, it is important to associate the creation of Hot Springs Reservation in 1832 with the legislative intent to provide free hot baths to Native Americans and soldiers marching the Trail of Tears.

To raise the academic bar on the law of the land, Title 16 of the United States Code Chapter 1 National Parks, Military Parks, Monuments and Seashores statute from 2013, maintained online by Government Publishing Office, must be cross-referenced with National Park Service and Related Organizations Pub. L. 113–287, § 3, Dec. 19, 2014, 128 Stat. 3096, as codified at 54USC§100101. The fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations under 16USC§1 (2013) and 54USC§100101(a). Law enforcement within the National Park System are regulated by torts under 16USC§1a-6 (2013) and 54USC§102701. The National Park Service and Related Program Act Pub. L. 113–287, §3, Dec. 19, 2014, 128 Stat. 3094, did not inform the public that they were immediately adding four new titles of law to the end of the United States Code, and was gravely error to destroy the original National Parks Service statute in 16USC§1 to §18f-3, leaving only the violently unlawful protection of the individual right to bear arms statute at 16USC§1a-7b. Congress must restore 16USC§1 to §18f-3 to the condition it was in 2013 and transfer the protection of individual right to bear arms at 16USC§1a-7b to the end of the chapter on obstruction of lawful hunt at 16USC§5208. to lay down arms under common Art. 3 of the Geneva Convention (1949) whereas this law pertaining to the National Wildlife Refuges interferes with the territorial integrity of the National Park Service in flagrant disregard for the principle of non-use of force, the *jus cogens*, universal norm of international law under Art. 2(4) of the UN Charter pursuant to Military and Paramilitary Activities in and against Nicaragua (*Nicaragua v. United States of America*) Judgment No. 70 (1986).

The Department of Justice holds: The two most significant amendments to the Organic Act lie in the 1970 National Park System General Authorities Act and the 1978 Redwoods National Park Expansion Act. National Park System General Authorities Act, Pub. L. 91-383, August 18, 1970, 84 Stat. 825, codified as 16 U.S.C. §1a-1 to 1a-7 provides that all of the nation's parks – whether they include natural, cultural or historic resources – are united under the mission, purpose and protection of the Organic Act. The Redwoods Act amendments, requires all park management activities shall be:

Conducted in light of the high public value and integrity of the National Park System and not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress in Pub. L. 95-250, Title I, §101(b), Mar. 27, 1978, 92 Stat. 166 (amending 16 U.S.C. §1a-1). This amendment reaffirms the mandate set forth in the Organic Act and directs the National Park Service to manage park lands in a manner that would not degrade park values. *Citizens to Preserve Overton Park, Inc.* v. *Volpe*, 401 U. S. 402, 410 (1971) and *Grayned v. City of Rockford* 408 US 104 (1972) established the basic legal framework for judicial review of the actions of administrative agencies under 5USC§706. The court must find that the actual choice was not arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. It is a basic principle of due process that an enactment is void for vagueness if its prohibitions are not clearly defined or 'unconstitutionally vague'. if arbitrary and discriminatory enforcement is to be prevented, laws must provide explicit standards for those who apply them.

While the Organic Act directs the National Park Service to regulate park lands pursuant to the standards set forth in the statute, it is silent as to the specifics of park management. *S. Utah Wilderness Alliance v. Dabney*, 222 F.3d 819, 826 (10th Cir. 2000) ("It is unclear from the statute itself what constitutes impairment, and how both the duration and severity of the impairment are to be evaluated or weighed against the other value of public use of the park."). Thus, as noted in the often-cited case 1996 case interpreting the Organic Act, *Bicycle Trails Council of Marin v. Babbitt*, 82 F.3d 1445, 1454 (9th Cir. 1996), "the Park Service has broad discretion in determining which avenues best achieve the Organic Act's mandate." In line with this broad discretion, the Organic Act provides the Park Service with the authority to make such regulations as it deems "necessary or proper for the use and management of the parks" under 16USC§3. The National Park Service interprets the Organic Act through Parks, Forests and Public Property in Title 36 of the Code of Federal Regulations. The superintendent may require permits, designate sites or areas, and establish conditions for camping under 36CFR§2.10(b)(4) 6am. Residing in park areas, other than on privately owned lands, except pursuant to the terms and conditions of a permit, lease or contract, is prohibited under 36CFR§ 2.61(a). A special use authorization is not required for camping in the National Forest under 36CFR§251.50(c).

It is true that a number of laws in the United States Code pertaining the national parks are unconstitutionally vague and in want of repeal to protect the public against arbitrary and discriminatory enforcement. High on the list of repeals is Jurisdiction by the United States, fugitives from justice in Crater Lake National Park under 16USC§124 of Aug. 21, 1916, ch. 368, § 1, 39 Stat. 521 after the death of Judge John Waldo (1945-1907). Any Oregon warrant for their imaginary rights acquired and taxes pursued by the National Park Service would have to be discouraged by a federal judge under Rule 4 Fed. Crim. P. In the case of Hot Springs National Park, it is necessary to repeal the Taking or use of or bathing in water in violation of rules and regulations under 16USC§374 legislated in Sec. 4 of An Act Conferring jurisdiction upon United States commissioners over offences committed in a portion of the permanent Hot Springs Mountain Reservation, Arkansas [H. R. 13350] Apr. 20, 1904 (33 Stat. 188); as amended by the act renaming Hot Springs Reservation to Hot Springs National Park of March 4, 1921 (41 Stat. 1407). During the 1880s open springs were either covered over by the government or the bathhouse owners to prevent their pollution (Cron '46: 220). By the 1890's, most of the springs were covered and a complicated piping system had evolved for supplying the bathhouses with hot water. In 1901 the springs had to be uncovered to give access for sampling, and chemical analyses to be made by Haywood (1902) (Bedinger et al '79: 3, 4).

Although fountains have been constructed to facilitate the taking of drinking water, due to the

excessive heat of one fountain, it is not physically possible to bathe in the waters without paying a bathhouse. The free government bathhouse for the indigent program created Dec. 16, 1878 (20 Stat. 258) and reauthorized June 16, 1880, ch. 246, § 3, 21 Stat. 289; Apr. 12, 1904 (33 Stat. 173); May 23, 1906 (34 Stat. 198), Apr. 30, 1908, (35 Stat. 98) was tolerable (Haywood 1912). Free government bathhouses served as partial compensation for diverting the natural hot springs to private use, however African-Americans had to lie about being unable to pay to bypass segregation and by enforcing the arbitrary definition of indigent as being unable to pay, the law violently conflicts the original intention of the legislature to provide free baths to everyone sick, indigent or just dirty from being forced to march the Trail of Tears that provokes us to provide the public with a free heated outdoor swimming pool and hot tubs today pursuant to the Clayton Anti-Trust Act under 15USC§13 and getting human trials of eucalyptus, lavender or peppermint to compete with vaccines for advertising to cure coronavirus in the news under §13a. The city prohibition of drumming, an antiquated practice of physicians and bathhouses paying a large share of revenues to outspoken advertisers "drumming for support", misleads the nation to believe Hot Springs discriminate against medicinal Native American drumming, when they would be highly valued buskers and bathers in the free swimming pool and hot tubs we hope to provide everyone 24/7 to justify making Hot Springs National Park the official first national park (Paige & Harrison '87: 157-159). Native Americans told white settlers no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs (Paige & Harrison '87: 22).

2. Natural History

The 47 hot springs of Hot Springs National Park are the result of complex natural geological processes. The park is in the Zig-Zag Mountains, a section of the Ouachita Mountains of central Arkansas and eastern Oklahoma. The topography of the park is mountain ridges running from east to west, intermontane basins, and the piedmont plateau. Hot Springs lies at the southern edge of these ridges. These mountains are mainly of sedimentary composition, encompassing geological formations from the Ordovician (440 million years ago) period and, possibly, as early as the Cambrian (470 million years ago) period. During most of the Paleozoic era (470 to 230 million years ago), what became the Ouachita Mountains lay submerged under an ancient shallow sea that extended from Louisiana to New Hampshire. Approximately 500 million years ago, geological stresses deep in the earth resulted in the exceedingly slow movement of the South American plate northward to collide with the North American plate. This collision of tectonic plates slowly over geological time created the Ouachita Mountains (Hanor '80: 22-30). The rocks found within the park are approximately 400 million years old and are mostly sedimentary in nature. Rocks like sandstone, shale, chert and novaculite were originally formed in the deep ocean environments of the Carboniferous Period. The sedimentary rocks that were folded and uplifted to form the Ouachita mountains were originally flat-lying. Rock layers exposed along bluffs or road-cuts appear to be tilted, or even to stand up straight, rather than lay flat. Although once more jagged, time has reduced the steep peaks of ancient mountains into more gently rolling hills. The springs emerge from the Hot Springs Sandstone Member of the Stanley Shale near the anticlinal axis, between the traces of two thrust faults that are parallel to the axis of the anticline (Bedinger et al '79).

Temperature in the Earth increases with depth below the surface, something known as the geothermal gradient. The deeper that you travel towards the Earth's core, the hotter the rocks become. Over the centuries, rainfall in the area northwest to northeast of the park has percolated down through rock fractures and fissures in the Big Fork formation and Arkansas novaculite where the heat from the interior of the earth warms the water causing it to rise to the surface by way of joints and faults in the

Hot Springs sandstone formation. Rainwater travels down 6,000 to 8,000 feet below the surface, slowly heating up as it travels deeper and deeper. The water travels for 4,000 years before hitting a fault line and relatively quickly, in about 400 years, reaching the surface in what is now the historic downtown area of Hot Springs National Park, along Bathhouse Row. When rain falls on the recharge zone, it follows the faults and cracks to a depth of 8,000 feet and then re-emerges approximately 4400 years later with an average surface water temperature of 143° Fahrenheit (62° Celcius). This journey from rainwater to spring water takes about 4,000 years. The dissolved minerals in the water precipitate to form the white to tan travertine or "tufa rock" seen near the openings of the hot springs. Slightly less than a million gallons of water a day flow from the 47 springs in the park (Bryan '21: 18).

In January of 1859, surveyors measured 54 hot and cold springs, numbering them according to their temperatures. The average recorded temperature of the hot springs was 134°F (56.7°C) and their flow was measured at about 150,000 gallons per day. Today, with more modern methods of measurement, the average daily flow is just about 700,000 gallons per day, and the average temperature of the monitored springs in January is 131°F (55.1°C). According to the 1979 US Geological Survey the combined flow of the hot springs ranges from 750,000 to 950,000 gallons per day (3.29x 10-2 to 4.16x 10-2 cubic meters per second) (Bedinger et al '79). In the early 1900s the springs were renumbered and named. Some springs became clogged with minerals over time and stopped flowing. As a result the number of springs and their relative locations are much different than in 1959. Pipes collect water from the hot springs. There are green boxes on the Promenade that surround individual springs to protect their quality and connect them to the network of pipes. Some springs are hotter than others, some have more flow, and some are more prone to temporary dips in temperature due to rainfall.

Prior to 1877 some of the springs were walled in and covered by masonry arches to protect them from contamination (Scully '66: 118). By the 1890's, most of the springs were covered and a complicated piping system had evolved for supplying the bathhouses with hot water. In 1901 the springs were uncovered to give access for sampling, and chemical analyses were made by Haywood (1902). The spring enclosures were opened again in 1931 for cleaning; some of them were deepened, and the present-day (1974) collection system was constructed. The collecting system diverts the flow of 44 springs to a central reservoir, from which the water is redistributed to individual bathhouses. Since 1948 all the water delivered to the bathhouses has been metered. Excess water overflows into Hot Springs Creek when storage reservoirs are full. Flows of several springs were measured or estimated in 1972 after the springs were uncovered for sampling in January. These measurements showed a general de- cline of flow in the springs located at higher elevations. In 1972 spring number 1 had a very small or no flow-a decline from 28,800 gal/d (1.26x10 -3m3/s) in 1901 and 9,600 gal/d (4.21 x 10-4m a;s) in 1931. Spring numbers 47 and 48 declined from 13,500 gal/d (5.91 x 10-4m3/s) in 1931 to 8,600 gal/d (3.77 x 10 - 4m3/s) in 1972. However, spring number 7 declined from 18,516 gal/d (8.11 x 10 - 4m3/s) in· 1901 to 1,760 gal/d (7.71X10 - 5m3/s) in 1931, but rose to 2,800 gal/d (1.23x10-4m3/s) in 1972. Spring number 49, which was nonexistent in 1901, had a flow of 58,000 gal/d (2.54x 10 -am3/s) in 1972 (Bedinger et al '79: 3, 4, 9).

Temperature measurements were the first scientific data collected at the hot springs. William Dunbar and George Hunter, in 1804, recorded 67.8°C (Celsius) (154.0°F) for the hottest spring (Weed, 1902). In 1860, the highest temperature measured by Owen (1860) was 64.4°C (147.9°F).Glascow (1860) recorded a maximum of 65.6°C (150.1°F). The maximum temperature mea- sured by the Geological Survey, in 1972, was 61.8°C (143.2°F). Measurements of temperatures of individual springs by several investigators from 1890 to 1953 (table 3) show maximum temperatures of 63.9°C (147.0°F) in 1901,

64.4°C (147.9°F) in 1931, and 63.3°C (145.9°F) in 1952. Thirteen of the same hot springs were measured by Haywood (1902), Hamilton (1932), and Kuroda (1953). The average temperatures of these hot springs when measured in 1901, 1931, and 1952 were 58.2°C (136.8°F), 57.3°C (135.1°F), and 58.9°C (138.0°F), respectively. These particular data indicate that there has been a slight decline in maximum water temperatures with time (0.6°F in 10 years). Spring-source temperature has been decreasing at an average rate of about 0.077°C (0.14°F) per year since 1901, although data from 1804 to 1931 indicate a lower rate of decline. Also, measured maximum temperatures from 1931 to 1972-a period in which the springs were undisturbed-have decreased at about the same rate (0.073°C, or 0.13°F per year) as the spring-source temperature decline from 1931 to 1972. This coincidence may be a fortuitous circumstance of sample timing and distribution. The temperatures of ground water in wells in the vicinity of Hot Springs, other than the hot springs themselves, range from 12.0°C (53.6°F) to 52.8°C (127.0°F) (tables 4, 5; fig. 6). The warmer of these temperatures is the temperature of ground water in the immediate vicinity of the hot springs. The well on the grounds of the Arkansas Rehabilitation Center has a temperature of 52.8°C (127.0°F); the water from a well on the Arlington Hotel lawn, used to supply water to the cooling plant, has a temperature of 32.2°C (90.0°F; the temperature of the water from the well at the Arlington Hotel is reported to be 22.8°C (73.0°F)). The cold-water springs in the area are generally warmer than the well waters. The spring temperatures range from 15.6°C (60.1°F) to 26.8°C (80.2°F) (Bedinger et al '79: 9, 12, 14).

Hot Springs are made from sandstone with quartz veins. Many millions of years ago sand particles were deposited at the bottom of a shallow sea in this area. Cemented by water-borne minerals, buried under deep layers of sediments, then lifted in an upheaval of the land, the rocks thus formed are now exposed by erosion. The white veins are quartz-silica deposited by water which filled cracks in the rocks eons ago. In the hot-springs system, the main sources of silica are the Bigfork Chert and the Arkansas Novaculite. Chert and novaculite are both com- posed of chalcedony, a cryptocrystalline quartz, and microcrystalline quartz. The amount of silicic acid (a mixture of silicon, hydrogen and oxygen) data at Hot Springs shows a uniform amount of silica (SiO3 – silicon and oxygen) is 41 – 41 mg/L, averaging 41.3 mg/L and calcium is 43.9 mg/L. Sulphuric acid is what gives some hot springs a “rotten egg” smell, such as those at Yellowstone National Park where the water is too acidic to drink. The smell is missing at Hot Springs because this water is not heated through a volcanic process. Instead, the water warms up over thousands of years as it travels along what is known as a geothermal gradient. In 1856 Professor E. Hillis Larkin made a quantitative analysis of the thermal water. gallon of water. The analysis of a gallon of thermal water at a temperature of 145 degrees revealed the following in grains: Silicic acid 24.74, Sesquioxide oxide of iron 1.12, Alumina 5.15, Lime 28.93, Magnesia .73, Chlorine .07, Carbonic acid 21.36, Organic matter 8.31, Water (sic) 1.72, Sulfuric acid 4.40, Potash 1.46, Soda 2.01, Iodine and bromide trace – 100% (Paige & Harrison '87: 182).

Recent (1973) analysis showed the radium concentration to be 2.1 picocuries (10-12 curies) per liter (Bedinger et al '79). The presence of radium in the waters of the hot springs was established by Schlundt (1935) when he determined an average value of 1.38 picograms per liter (1.35 picocuries per liter) of radium for three samples. Recent (July 1973) analyses of the waters by the U.S. Environmental Protection Agency show a radium concentration of 2.1±0.22 picocuries (10-12 curie) per liter (Bedinger et al '79: 25). Radon occurs throughout most environments in very small quantities. Radon is a gas that occurs as the end product of radium decay, it is carcinogenic and causes an estimated 21,000 cases of lung cancer a year. The greatest potential for human exposure to radium is through drinking water, where levels are usually less than 1 picocurie per liter (pCi/L) but higher levels (>5 pCi/L) have been detected. Oral exposure has resulted in anemia, necrosis of the jaw, abscess of the

brain, and terminal bronchopneumonia. The Environmental Protection Agency (EPA) regulates the amount of radium in drinking water so that it will not contain more than 5 pCi of combined radium-226 and radium-228 per liter of water (Roper '90: 8).

The dissolved-solids concentrations of the waters in the area generally range from 175 to 200 milligrams per liter. The main differences in the quality of the hot water, compared with nearby cold ground waters, are the higher temperatures and the higher silica concentrations of the hot springs. Cold waters in the area generally range from 15.0 to 26.8 degrees Celsius. The silica concentrations of cold ground waters range from 2.6 to 13.0 milligrams per liter, whereas the silica concentration of the hot springs is about 42 milligrams per liter. The high silica concentration of the hot springs is 1 due to the increased solubility of silica in hot water. The silica concentration of the hot springs indicates that the maximum temperature reached by the hot-springs water is no more than a few degrees higher than the temperature at which the springs emerge. One significant difference between the hot-springs waters and the cold wells and springs in the region is their sodium (Na) concentration. The average sodium concentration of the 12 relevant cold-water samples is 1.8 mg/L (0.08 mmol/L), whereas that of the hot springs is 4.0 mg/L (0.18 mmol/L) (Bedinger et al '79).

Several species of ostracods, algae and harmless bacteria have been found living in the hot springs. Ostracods, small relatives of shrimp and other crustaceans, are sometimes called seed shrimp. Most ostracods look like a tiny kidney bean the size of a rain of sane with a dot for an eye and little legs sticking out of the bottom. They are able to open up both halves of their body like a clam and pull all of their legs and antennae inside their shell – like a turtle does when it feels threatened. Two species of miscroscopic thermophile have been discovered and named – *Fontimonas thermophila* and *Thermoanaerobaculum aquaticum*. The northern slopes of the ridges and basins provide a suitable habitat for deciduous forest dominated by oak and hickory. Pines predominate on the south sides of the ridges. Other shrubs and trees that flourish in this environment include yaupon, easter hackberry, elm, juniper, dogwood, serviceberry, redbud, and holly. Ground cover in the spring and summer includes pinks, verbenas, phlox, spiderworts, golden ragwort, purple cornflower, rose gentians, asters, butterfly milkweed, and sunflowers. These species are a few of the various wildflowers found in the area. Cypress trees are Arkansas's largest woody plant. Many live to be more than 1,000 years old. Diospyros,the genus that persimmon trees (*Diospyros virginiana*) are part of, loosely translated means “fruit of the gods”. The tree's ripe fruit is prized by man and beast, however, the unripe fruit is highly astringent. The pawpaw is a sweet tangy, luscious or naudeating. Pollinating flies and beetles are drawn to pawpaws by flowers, which resemble decaying flesh in both color and fragrance. The beauty-berry is a shrub that produces pink to pale purple flowers and repels mosquitoes when rubbed on the skin. The thorns of the honey locust, which can grow to more than 15 inches in length, are thought to have developed to protect it from long extinct Pleistocene megafauna, such as ground sloths (Ogle et al '21).

A wide variety of animals have lived in the park area over the centuries. Bison, wapiti, mountain lion, and wolf left the region after the arrival of European and American settlers. Some of the present-day species near hot springs include squirrel, rabbit, opossum, fox, coyote, skunk, raccoon, gopher, weasel, mink, rat, frog, and armadillo. Hot Springs National Park lands lie in the Mississippi flyway, which means migratory birds, game birds, and waterfowl spend portions of the year in the park. Long falls, mild winters, and early springs with few frosts and snows mark the seasonal progress of the year. This climate produced a typical southeastern woodland environment conducive to exploitation by aboriginal people (Bedinger '74: 3-4). The Southern Pine Beetle, which also carries and transmits disease-causing

Blue stain fungi is a native pest species, but the Emerald Ash Borer was accidentally imported form Asia. It first appeared in North America in 2002 and has since spread rapidly over the continent. Oak wilt, a disease caused by the fungus *Ceratocystis fagacearum*, spreads through spores transported by insects and human movement of firewood. It wilts and kills trees by impacting how they absorb and move water. Fire ants (*Solenopsis invicta*)_ are invasive species native to South America. Atypical colony of fire ants contains about 80,000 individuals that are each less than one-quarter of an inch in length, These ants both bite and have a painful venomous sting, that gives them their name.

Archeological evidence suggests that during the Paleo-lndian period (circa 12,000 to 8000 B.C.), early humans quarried for novaculite, a dense, chert-type rock, near the hot springs. Lanceolated novaculite points *are* found in Paleo-lndian sites in southern portions of Arkansas along the Ouachita and Red rivers (Mason '62: 234). The Archaic period (8000 to 1000 B.C.) is characterized by the human adaptation to the changed environmental conditions after the melting of the glaciers. An economy based on gathering, fishing, and small-game hunting developed. Typical artifacts include chipped and ground stone tools, atlatls, grinding stones, fishhooks, and various styles of projectile points. Late in the period fully grooved axes and tubular smoking pipes were added. Ample evidence exists that some of these tools and projectile points were made from novaculite quarried near Hot Springs. Novaculite tools from the Hot Springs quarries have been unearthed in Indian graves and mounds from the shores of the Gulf of Mexico to the Atlantic Ocean (Haag '61: 318-319).

Paleo-lndians and their descendants lived and built mounds along major waterways such as the Ouachita River (which the Gulpha Creek and Hot Springs Creek empty into). Various Indian tribes frequented the Hot Springs and Gulpha area for the novaculite and the water, but no evidence exists to suggest a significant settlement in the very area of the Hot Springs (Reyer '87). Around the 18th century the Caddo settled in the area, followed by the Choctaw, Cherokee, and other tribes in the early 19th century. These Indians told early white settlers that no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs. The Quapaw lived in the Arkansas River delta area (Mississippi) and went to the Ouachita area to hunt and use the springs. In the 19th century the Quapaw were placed on a reservation southeast of Hot Springs. On August 24, 1818, the Quapaw ceded land including the Hot Springs to the U.S. and were removed to the Indian Territory (present-day Oklahoma) (Scully '66: 5-6).

3. European Conquest

Hernando de Soto left Spain on April 6, 1538, with a fleet of nine vessels, 600 men and permission to conquer Florida from the king of Spain, Charles V (Hodge et al '07). Diary notes taken by Soto's private secretary, Rodrigo Ranjel, described hot streams in this vicinity. These remarks possibly could be the first European description of the Arkansas Hot Springs. De Soto fell ill and died on the bank of the Mississippi River on May 21, 1542. Shoreline Indian attacks and hazards arising from navigating down an unknown river punctuated their voyage to the Gulf of Mexico. Eighteen days later, 311 survivors of the original 600 men arrived at the mouth of the Mississippi River. Although the expedition failed to find any material wealth, it left a legacy of discoveries — including the knowledge of natural hot springs in what became Arkansas (Lily '83). Don Tristan de Luna y Arrellano assembled and equipped an expedition of 1,500 men to conquer the territory. The expedition failed and this was the last significant attempt by the Spanish to explore and exploit the area of North America drained by the Mississippi River (Wallace 1899: 33).

French explorers undertook the next sustained effort at exploration of the region. French exploration centered on finding a water route from the Great Lakes to the sea through the interior of North America. During one exploration, Rene Robert Cavelier, Sieur de la Salle, claimed the lands drained by the Mississippi for France on April 9, 1682. He named it Louisiana in honor of French King Louis XIV. La Salle tried to establish a colony at the mouth of the Mississippi, but was unsuccessful. A French expedition under Pierre Le Moyne, Sieur d'lberville, and Jean Baptiste le Moyne, Sieur de Bienville II, established a settlement near the mouth of the Mississippi in 1699, which they named Biloxi (Fort Maurepas). A few of the French settlers on the Mississippi River possibly visited and bathed in the hot springs before the formal transfer of Louisiana to Spain in 1767 (Scroggs '11: 6-7). The outbreak of the Seven Years' War in 1755, known in North America as the French and Indian War, concluded in 1763 with the expulsion of the French from North America. In 1762 France persuaded Spain to enter the conflict, promising the cession to Spain of Louisiana lands on the west bank of the Mississippi and those lands on the east bank below Bayou Manchac, which included New Orleans. The Treaty of Fontainebleau in 1762 formalized this agreement. The Treaty of Paris in 1763 further clarified the military and diplomatic aspects of the agreement. Great Britain received the provinces of East and West Florida from Spain in exchange for La Habana, Cuba, which the British had captured during the war. Great Britain also obtained from France that portion of Louisiana lying east of the Mississippi and north of Bayou Manchac to a point on the east bank of the Mississippi above Natchez. Spain received from France those sections of Louisiana described in the Treaty of Fontainebleau (Moore '76: 2, 40).

In March 1766 Spanish officials arrived in New Orleans to take possession of Louisiana from the French. The formal transfer of the colony from France to Spain occurred on January 20, 1767 (Wallace 1899: 287-288). During the Spanish occupation, Don Juan Filhiol, following instructions from the Spanish Louisiana governor, conducted an exploration of the upper parts of the Ouachita River. Near the river he found hot springs coming from the ground, boiling and clear. These hot springs cooled as they mingled with the waters of cooler mountain streams in the area. In December of 1787, Filhiol petitioned the Spanish government for a land grant for an area occupied by these springs. The Treaty of Paris of 1783, which formally ended hostilities of the American Revolution, left several important matters unresolved. The Treaty of San Lorenzo in 1795 between the United States and Spain established a new boundary between these two countries at the thirty-first parallel on the south and the Mississippi on the west. The treaty further guaranteed the United States the right to navigate the Mississippi and to deposit goods in New Orleans. The Spanish king, in the secret Treaty of San lldefonso on October 1, 1800, ceded Louisiana back to France. The Treaty of Madrid on March 21, 1801, reconfirmed this agreement. Actual transfer of Louisiana from Spain to France occurred on November 30, 1803 (Whitaker '62: 51).

4. Acquisition by the United States

President Thomas Jefferson instructed his minister to Paris, Robert R. Livingston, to negotiate with French Emperor Napoleon Bonaparte for the purchase of Louisiana. Livingston set out for France in March 1803, with permission to offer up to $10 million for the purchase of New Orleans and the Floridas. (Jefferson erroneously believed that Spain had ceded the Floridas as well as Louisiana to Napoleon.) The French emperor met the American envoy and offered to sell all the Louisiana Territory to the United States for $15 million, with the proviso that France maintain trading privileges with Louisiana for 10 years following the transfer. On April 30, 1803, Livingston accepted the proposal and Napoleon ratified the treaty. The United States Congress ratified the agreement on May 22, 1803. On

December 20, 1803, the French, represented by Pierre de Laussat, formally turned over the Louisiana Territory to the United States Territorial Governor William C.C. Claiborne (Dickins et al 1860: 5; 708). In 1803, the United States bought over 800,000 square miles of land in the Louisiana Purchase, doubling the size of the country (Scully '66: 21).

President Thomas Jefferson sent several expeditions to explore this new region, including the Lewis and Clark expedition, and the less well-known Hunter and Dunbar "Grand Expedition" of 1804-1805s. Scientist Dr. George Hunter and explorer William Dunbar were tasked with documenting the southern regions of the new territory. President Jefferson initially wanted Hunter and Dunbar to explore the Red and Arkansas Rivers, but that plan was canceled because of the threat of Spanish and Native American intervention. Instead Dunbar suggested a shorter trip up the Ouachita River to the hot springs. On October 16, 1804, the Hunter-Dunbar expedition left Natchez for the hot springs with a small military escort and two local guides. The military escort was a lieutenant, a sergeant, and 12 men. This small expedition rowed a 23-oared boat up the Mississippi to the Red River and continued up Red River to Black River and into the Ouachita River. The shallow water hampered the progress of the boat, which was abandoned in favor of another one to get over the shallows. The expedition arrived in the vicinity of the springs on December 6, 1804, and the next day traveled to the hot springs (Scully '66: 21). The Hunter and Dunbar expedition wrote the "water is celebrated for its medicinal qualities; particularly in removing rheumatic pains and affections". The expedition encountered signs of habitation, Indian mounds and sizable path called the trace of Cadeaus. On arrival at the springs they discovered an open log cabin (McDermott '63: 104, 110). The expedition stayed for a month, studying the thermal water and exploring the surrounding area. It provided a scientific study of the landscapes, weather, people, plants, and animal life of northern Louisiana and southern Arkansas. He described six principal springs located either in the creek bed or on the east side of the creek. The temperatures in these springs ranged from 148° to 150° Fahrenheit. Dunbar found that in the cooler months vapor from the hot springs floated above the creek. Their astronomical and course-plotting records enabled the creation of accurate maps of the region and its watercourses (Rowland '30: 272).

Governor William C. C. Claiborne of the Louisiana Purchase Territory, on May 3, 1804, mentioned the springs of the Ouachita springs region in a letter to Major Richard King (Jones '55: 3). Thomas Rodney, U.S Judge and Land Commissioner of the Mississippi Territory mentioned Major Richard King's visit to the hot springs region in an October 1804 letter to his son Caesar A. Thomas indicating the medical virtues of the "boiling springs" (McDermott '63: 83). Lieutenant Zebulon Montgomery Pike led an expedition up the Arkansas River to the Rocky Mountains in 1806. There he dispatched Lieutenant James B. Wilkerson to return down the Arkansas River on a mapping expedition. Pike headed south where he was apprehended by Mexican officials and detained for a year. Wilkerson arrived in Arkansas Post on January 9, 1807. The maps that he drew located the hot springs sites. About 1807 Jean Emmanuel Prudhomme, a plantation owner, arrived at the hot springs and constructed a cabin. He came there to regain his health. After two years of bathing in the hot water and a diet of local foods, he had fully regained his health and returned home to Louisiana. By 1814 more than 20 summer shelters could be found in the valley, and two years later maps depicted trails from the Mississippi to the hot springs (Scully '66: 23, 26, 5). A visitor named Joseph Meetch recorded that, at any given time in 1815, up to 500 people, from as far away as South Carolina occupied the area (Valencius '02:154).

The Quapaw Indians ceded the hot springs and surrounding area to the United States government in August 24, 1818. Since the Quapaws ceded their land, including the Ouachita springs region, the

United States government, all prior claims to the area were void. The federal government used the 1818 treaty with the Quapaws to maintain its claim to the heart of the Ouachita springs region. Major Stephen H. Long of the Army's topographical engineers visited the area in January of 1818. He found approximately 60 hot springs in the vicinity of Hot Springs Mountain and estimated that the springs issued more than 1,000 gallons a minute. Long found that water in the hottest springs could be used for brewing tea or cooking meat or eggs (Brown '82: 12). Thomas Nuttall, an English naturalist, visited near the hot springs in May 1819, he noted that the springs varied in temperature from 86° to 150° Fahrenheit. One of the other visitors gave daily lectures on the origin and medical benefits of the hot springs (Nuttall '79: 124-12). In 1820 a party from Stephen Long's expedition to the Rocky Mountains stopped on their way back east to examine the hot springs. They found a Doctor Wilson at the springs dispensing medical advice on the use of the hot waters. The baths consisted of a few excavations in the rocks. Bathers regulated the flow of hot water to suit their pleasure (Scully '66: 23, 27, 28). An 1820 treaty designated southwest Arkansas for Choctaw resettlement, but this was amended in 1825 to redirect the Choctaws to Oklahoma. In the 1830s two "Indian removal" routes- - for the Choctaw and the Chickasaw- - passed about 20 miles to the southeast, with supplies in one instance obtained out of Hot Springs.

The Trail of Tears is over 5,043 miles long and covers nine states: Alabama, Arkansas, Georgia, Illinois, Kentucky, Missouri, North Carolina, Oklahoma and Tennessee. It passed by Hot Springs to the north as it traversed from Little Rock to Fort Smith. President George Washington, believed that the best way to solve the “Indian problem” was to “civilize” the Native Americans by encouraging them convert to Christianity, learn to speak and read English and adopt European-style economic practices such as the individual ownership of land and other property (including, in some instances in the South, African slaves). In the southeastern United States, many Choctaw, Chickasaw, Seminole, Creek and Cherokee people became known as the “Five Civilized Tribes” (Perdue '03: 51). The Treaty of Holston, negotiated with the Cherokees in July, 1791, explicitly recognized the national character of the Cherokees and their right of self-government. article of 17th November, 1792, made at Philadelphia by Henry Knox, the secretary at war, acting on behalf of the United States; the treaty made at Philadelphia on the 26th June, 1794; the treaties between the same parties made at Tellico 2d October, 1790; on the 24th October, 1804; on the 25th October, 1805, and the 27th October, 1805; the treaty at Washington on the 7th January, 1806, with the proclamation of that convention by the president, and the elucidation of that convention of 11th September, 1807; the treaty between the United States and the Cherokee Nation made at the city of Washington on the 22d day of March, 1816; another convention made at the same place, on the same day, by the same parties; a treaty made at the Cherokee agency on the 8th July, 1807; and a treaty made at the city of Washington on the 27th February, 1819. All of which treaties and conventions were duly ratified and confirmed by the Senate of the United States, and became thenceforth, and still are, a part of the supreme law of the land. Nonetheless, in 1830 President Andrew Jackson signed the controversial Indian Removal Act, that barely passed, which gave the federal government the power to exchange Native-held land east of the Mississippi for land to the west, in the “Indian colonization zone” that the United States had acquired as part of the Louisiana Purchase. At the beginning of the 1830s, nearly 125,000 Native Americans lived on millions of acres of land in Georgia, Tennessee, Alabama, North Carolina and Florida–land their ancestors had occupied and cultivated for generations (Wallace '11).

In the winter of 1831, under threat of invasion by the U.S. Army, the Choctaw became the first nation to be expelled from its land altogether. One Choctaw leader called it a “trail of tears and death. By the end of the decade, very few natives remained anywhere in the southeastern United States. Working on

behalf of white settlers who wanted to grow cotton on the Indians' land, the federal government forced them to leave their homelands and walk hundreds of miles to a specially designated "Indian territory" across the Mississippi River. This difficult and sometimes deadly journey is known as the Trail of Tears. Several states passed laws limiting Native American sovereignty and rights and encroaching on their territory. On 22 December 1830, the legislature of the state of Georgia passed an act to prevent the exercise of assumed and arbitrary power, by all persons, under pretext of authority from the Cherokee Indians and their laws, and to prevent white persons from residing within that part of the chartered limits of Georgia occupied by the Cherokee Indians, and to provide a guard for the protection of the gold mines, and to enforce the laws of the state within the aforesaid territory. In *Cherokee Nation v. Georgia*, 30 U.S. 5 Pet. 1 1 (1831) the Court found they did not have the political power to enforce an injunction against the several laws passed by the State of Georgia although they were repugnant to the Constitution, laws, and treaties. In *Worcester v. Georgia* 31 U.S. (6 Pet.) 515 (1832), the U.S. Supreme Court objected to these practices and affirmed that native nations were sovereign nations in which the laws of Georgia [and other states] can have no force. Worcester had entered the Cherokee Nation as a missionary under the authority of the President of the United States, with the permission and approval of the Cherokee Nation, and was nonetheless was sentenced to hard labour in the penitentiary for four years by the Sate of Georgia. President Andrew Jackson noted in 1832, if no one intended to enforce the Supreme Court's rulings (which he certainly did not), then the decisions would "[fall]…still born." In 1836, the federal government drove the Creeks from their land for the last time: 3,500 of the 15,000 Creeks who set out for Oklahoma did not survive the trip (Davis '08: 65-68).

In 1835, a few self-appointed representatives of the Cherokee nation negotiated the Treaty of New Echota, which traded all Cherokee land east of the Mississippi for $5 million, relocation assistance and compensation for lost property. "The instrument in question is not the act of our nation," wrote the nation's principal chief, John Ross, in a letter to the U.S. Senate protesting the treaty. "We are not parties to its covenants; it has not received the sanction of our people." Nearly 16,000 Cherokees signed Ross's petition, but Congress approved the treaty anyway. By 1838, only about 2,000 Cherokees had left their Georgia homeland for Indian Territory. President Martin Van Buren sent General Winfield Scott and 7,000 soldiers to expedite the removal process. In May 1838, the Cherokee removal process began. U.S. Army troops, along with various state militia, moved into the tribe's homelands and forcibly evicted more than 16,000 Cherokee Indian people from their homelands in Tennessee, Alabama, North Carolina, and Georgia. They marched the Indians more than 1,200 miles to Indian Territory. Whooping cough, typhus, dysentery, cholera and starvation were epidemic along the way, and historians estimate that more than 5,000 Cherokee died as a result of the journey. The tragic relocation was completed by the end of March 1839, with the resettlement of tribal members in Oklahoma (Ehle '11: 390-392).

John Pope, the Arkansas territorial governor in 1829, requested the United States Congress to erect at Hot Springs a building to accommodate the sick and indigent and either donate or lease the structure to the territory. The Congress took no action on this proposal. In 1830 Ambrose H. Sevier, Arkansas territorial representative, sent a letter to the editor of the Arkansas Gazette suggesting that the Arkansas Territorial Assembly may wish to lease the hot springs and dispense the proceeds to the needy. Sevier introduced the idea that the government might sponsor public health facilities in Hot Springs. The bill, which he sponsored, had a provision to lease the thermal springs and use the revenue for the support and maintenance of the sick and indigent persons who might visit the region for their health, that passed on April 20, 1832. The territorial assembly did not act on this proposal until 1832 when the United States Congress passed superseding legislation. In 1832 Sevier introduced a bill in Congress

stating: Be it enacted by the Senate and House of Representatives that the Hot Springs in Arkansas Territory, together with four sections of land with the springs, as near the center as may be, are hereby reserved and set apart for future disposal by the United States Government, and are not to be entered, preempted., or appropriated for any purpose or purposes whatever (White '64: 97).

Congress set aside the four square miles of land centered on the thermal springs as Hot Springs Reservation on April 20, 1832. Sec. 3 of An Act authorizing the governor of the territory of Arkansas to lease the salt springs, in said territory, and for other purposes (4 Stat. 505) provided: That the hot springs in said territory, together with four sections of land including said springs, as near reserved. the centre thereof as may be, shall be reserved for the future disposal of the United States, and shall not be entered, located, or appropriated, for any other purpose whatever. This removed the land from the public domain and moved it under the federal jurisdiction of the General Land Office. The same year that the United States Congress acted to place the hot springs under federal control, some 400 people traveled to the springs in hopes of restoring their health. The next year the Arkansas Territorial Assembly requested Congress to improve the navigable water routes to Hot Springs to aid the hundreds of invalids who made their way to the springs each year. Congress took no action on the request. The question of state or federal ownership of the hot springs remained open for the next several years. In 1833 the United States government awarded a mail contract, which stipulated that postal service to Hot Springs be conducted on a weekly basis. In 1836 the Arkansas Constitutional Convention debated a proposal to request the federal government return the hot springs to the state for disposition. The convention rejected the proposal and the springs remained under federal control (Carter '54: 82, 760-761, 106, 189).

In 1835 there were two log cabin stores in Hot Springs. By the end of the decade, travelers reported five bathhouses which provided tub and sweat baths standing near the springs. As large numbers of guests arrived the hotels expanded operations. One entrepreneur constructed a "house of entertainment" for guests' amusement. than their predecessors, and more of them appeared to serve the burgeoning spa industry (Scully '66: 25). During the 1840s the community of Hot Springs continued to grow, with saloons, boardinghouses, and hotels constructed to accommodate the increased visitation. The stage line began making trips to Hot Springs from Little Rock three times a week instead of twice. The trip took a day and a half and cost $6 one way. Road improvements, later, reduced the stage time to between 10 and 12 hours. In 1849, the General Land Office merged with the newly establish Department of the Interior. By mid-century, citizens of the country boasted that the chalybeate, sulphur and hot springs were celebrated from Vermont to Texas for their cure of all kinds of rheumatism and syphilitic complaints (McLane '65: 44).

The community of Hot Springs expanded in the 1850s. William H. Hammond became the first permanent physician in Hot Springs in 1850. The next year, the town of Hot Springs incorporated in 1851 (Abernathy '97: 5). An estimated 3,000 visitors from throughout the South, Midwest, and East traveled to the community in 1854. During the late 1850s the well-established settlement continued to grow. On the east side of the creek adjacent to the springs, seven bathhouses and three drinking pavilions had individual access bridges over the creek so that patrons could reach the facilities. Hotels continued to increase their patronage by adding ice-cream and soda fountains and drinking and billiard saloons (Brown '82: 63). In January of 1849 Henry M. Rector, the second most notable businessman in Hot Springs, went to Washington D.C. To protest a bill sponsored by Arkansas Senator Solon Borland to grant the Host Springs Reservation to the State of Arkansas, and the bill never emerged from committee. Senator Solon Borland moved to Hot Springs with his wife and children. He housed Dr.

William Hammond, Hot Springs' first physician. Rector served in the General Assembly of Arkansas from 1848 to 1851 and Surveyor General of Arkansas from 1853 to 1857, in 1858 he was elected to the Supreme Court of Arkansas, but resigned to run for governor, an office he held until November 4, 1862, when he resigned and joined the Confederate Army (Percefull '06).

The outbreak of the Civil War left Hot Springs with a declining bathing population. After the Confederate forces suffered defeat at Pea Ridge in March 1862, the Union troops advanced toward the Confederate capital of Little Rock. Confederate Governor Henry M. Rector moved his staff and state records to Hot Springs. Union forces did not attack Little Rock and the government returned to the capital city on July 14, 1862. Many residents of Hot Springs fled to Texas or Louisiana and remained there until the end of the war. In September 1863 Union forces occupied Little Rock. During this period, Hot Springs became the prey of guerrilla bands loosely associated with either Union or Confederate forces. They pillaged and burned the near-deserted town, leaving only a few buildings standing at the end of the Civil War (Scully '66: 159).

After the Civil War an extensive rebuilding of bathhouses and hotels took place at Hot Springs. The year-round population soared to 1,200 inhabitants by 1870, and bathhouses were offering amenities such as iron pipes to carry the hot water from the springs, oilcloth floormats in the bathrooms, and even rugs and mirrors in dressing rooms. A few changes occurred in the bathing regimen after the Civil War. Each bather brought two towels, a flannel bathing suit, a tin cup, and a bucket capable of holding two quarts of hot water to the bathhouse. Bathers undressed in one room and proceeded to another room to take a tub bath for 15 to 20 minutes. By the 1870s some bathhouses recommended only three minutes for the hot bath, and a three-minute timer stood by the tub. Next came the steam bath in which the bathers remained for as long as they could stand the heat--usually six to eight minutes. During the bathing regimen, they constantly drank the hot water. After the steam bath, they went back to the dressing room where a bath attendant wrapped them in blankets. Then they walked back to their hotel or boardinghouses where they rested for 30 minutes under the blankets. The bathers were warned not to fall asleep as this was considered dangerous. Ral Hole was a popular spring. Here the hot water pool had a mud bottom and was channeled to a lower pool for cooling. The bathers took off their clothes in the woods nearby and entered the lower pool slowly, going in deeper as they got used to the water temperature. After 10 to 20 minutes they returned to the bank and plastered themselves with mud. They lay for several hours with the mud pack on before returning to the pool and washing themselves off. Sometimes 20 people crowded into this pool for a bath. Men used the pool during the afternoon and women bathed there in the morning. By the mid-1870s the bathing regimen became more diverse, and physicians prescribed various types of baths for patients. Physicians prescribed specific times and manners for a person to bathe, steam, and lie in pack blankets. Visitors were cautioned against taking the water without a doctor's advice. The period of time for tub baths became six to 10 minutes and the time in the steam bath shortened to two minutes; only one bath regimen took place each day. The water mixture for the tub baths consisted of two parts cold water to one part hot water (Stevens 1876).

4. Federal Administration

The federal government fought a legal battle for almost half a century to retain title claimed in the an act passed on April 20, 1832 (4 Stat. 505). This act reserved the hot springs together with four sections of land surrounding the springs for the future disposal of the United States. The federal government's tenacious battle to obtain clear title to this region saw the federal government relinquish title to millions of settled and unsettled public land acreage elsewhere (Renner '88). Congress often debated

the issue of title to the Hot Springs area between 1867 and 1870. Several private claims referred to as the Hot Springs Cases were consolidated and tried as one. The Court of Claims decided in favor of the federal government in a decree on April 26, 1875, declaring that the legal and equitable title to the Ouachita springs region was vested wholly and absolutely in the Untied States. However, this ruling did not halt private growth. The U.S. Supreme Court affirmed the governments title to the springs and surrounding area and disallowed claims in the *Hot Springs Cases*, 92 U.S. 698 (1875), refusing to intervene on behalf of either party other than reaffirm that the United States is the owner of the property in *Gaines v. Hale*, 93 U.S. 3 (1876). The government took full control of the area on June 28, 1876, when a government Receiver arrived at Hot Springs. The 1876 Supreme Court decision resulted in the introduction in the United States Congress of a bill calling for the establishment of a three-member commission to adjudicate all land claims there. This legislation passed, and President Ulysses S. Grant signed the legislation into law on March 3, 1877. President Rutherford B. Hayes appointed Aaron H. Cragin (chairperson), John Coburn, and Marcellus L. Stearns to the Hot Springs Commission. John W. Anderson received an appointment as clerk, and Frederick A. Clark became chief engineer and surveyor (Hot Springs Reservation Commission 1878: 3-4, 7).

It was not until 1877 that a caretaker was sent to the site to take control. Superintendent Benjamin Kelly was dispatched with orders to remove squatters and land claimants from government property and regulate public access to the hot water. In 1877, General Benjamin F. Kelley arrived at Hot Springs Reservation as the first superintendent. He was quickly approached by bathhouse owners to solve the "problem" of the poor people living in a tent city known as "Ral city" on Hot Springs Mountain above the springs. This small community was made up of people who were not ab le t pay to take the treatments in the bathhouses. They dug out pools around the springs so they could bathe in the thermal water. The Ral Hole, a spring that was covered by a wooden shack, allowed poor people who were afflicted with all kinds of disease to bathe. Kelley eventually moved the transient town to the south side of the mountain so it would not impact the bathhouses' water supply. Kelleytown, as the new area was called consisted of a barracks and two pools, one each for men and women. Superintendent Kelley had the Ral Hole filled in because it was contaminating the surrounding water. Supporters of the spring rallied and threatened violence. In response, federal troops were dispatched to calm the situation and enforce the closing of the Ral Hole. Kelley kept the pools open on the south side of the mountain and build a small building over the Mud Hole spring, which later became the first government free bathhouse. In February 1878, Superintendent Kelley requested funds from the wealthier patrons of the springs to help feed, clothe, shelter and care for 100 to 300 poor invalids who at any given time depended on charity. However a few weeks later pa fire consumed a good portion of the federally owned health resort on March 5, 1878 (Hudgins '52: 109).

The threat of starvation prompted a petition to the federal government and city council on September 4, 1878 pleading for water rents to be used to buy food for the poor. In a petition to the Secretary of the Interior on September 30, 1878, Hot Springs Mayor made known their disapproval of the way the government had treated the helpless class and pleaded for federal relief for the impoverished transients in the area. On November 10, 1878 Superintendent Kelley absolved the government of responsibility for the chronically ill and impoverished by portraying them in the following manner: You are aware, doubtless, that we have congregated in this place at all times, a floating population of five hundred or one thousand of the most depraved characters from all parts of the world, gamblers, robbers, thieves, fakires, bummers, loafers, beggars and etc. most of them suffering from a loathsome disease contracted in dens of vice. These creatures, most of them are without any means, and many of them are ready for any desperate enterprise having no regard for the rights of property of human life. Although Kelley's

actions make it appear that the federal government had little interest in providing health care for poor visitors to Hot Springs, in December 1878, the congress passed a bill stipulating: The superintendent shall provide and maintain a sufficient number of free baths for the use of the indigent, and the expense thereof shall be deprived out of the rentals hereinbefore provided for. According to the author of an 1876 newspaper article, seventy-five percent of patrons in Hot Springs suffered from complaints of mercurial syphilitic character (Percefull '06).

The establishment of free bathing in 1878 and the highly visible Government Free Bathhouse was a recognition of Congress of the great and general faith in the curative properties of the water, but the government's actions amounted to an invitation to the indigent invalids of the entire country to come to Hot Springs for relief. By January of 1879 Hot Springs needed the intervention of the Army Medical Department to help with the large numbers of persons living in or visiting the town. Hot Springs had a population of 5,000 and played host to 2,000 to 3,000 visitors at any given time. Sewage became a major problem. Many residents openly advocated ousting the Interior Department and turning control of the Hot Springs reservation over to the War Department. On June 11, 1879 Congress passed a bill that allowed anyone with a claim to the Hot Springs area, including the federal government, to bring suit in the Court of Claims. A receiver would be appointed to collect rent. The War Department represented the government agency most respected by Americans, and it was viewed as responsible for public health. By 1880 the Medical Department of Army managed federal funds in support of indigents in several hospitals in other parts of the country, regardless of their status as veterans or non-veterans (Percefull '06)

On June 16, 1880 an act of Congress declared North, West and Sugar Loaf Mountains, with a total of 994.07 acres surrounding the newly established permanent reservation as forever reserved from sale,. These mountains would best serve the public interest as undeveloped property and dedicated them to public use forever as public parks (Garrison '30: 549). Out of the approximately 2,530 original acres set aside as a federal reservation in 1832, the government in 1880 set aside over 900 acres for a permanent reservation. The reserved property included North Mountain, West Mountain and Sugar Loaf Mountain as future parks and together with Hot Springs Mountain a permanent reservation administrated by the Interior Department was created. The Department relinquished a little over a thousand acres to individuals, the municipality of Hot Springs, and government of Garland County. Two years later, in 1882, Congress funded the establishment of an army and Navy hospital complex, located on 24 acres of the southwest corner of Hot Springs Mountain, under the administrative control of the War Department. In 1880, with clear title to the thermal springs of the Ouachita springs region and the surrounding area, the federal government now controlled precisely two cities, Hot Springs and the nation's capitol, the city of Washington, located in the federal District of Columbia. Like Washington D.C., Hot Springs had a sewage problem at the time the federal government took control. At the same time the federal government addressed a long standing need to build a permanent military hospital for Civil War veterans on the ground of the federal reservation in Hot Springs, and the public health facility that thereafter dominated the scene in Hot Springs. The federal government worked in partnership with local charity to provide for a growing number of needy invalids. Over forty physicians worked in Hot Springs by May 1880 (Percefull '06: 4, 5).

Funding for the Hot Springs creek containment and sewage outlet project soon followed one month after appropriation of funds for the Army and Navy hospital. The sewer conduit, supervised by Colonel Hamblen and the construction of the hospital, under the control of Captain J. W. Jacobs of the Hot Springs Military Reservation, reinforced the perception that the federal government sponsored

significant public health facilities in Hot Springs (Percefull '06). During the 1880s a few of the open springs gradually dried up. Corn Hole, a popular spring for people to soak their feet, dried up in 1882, and government officials covered over the mudhole. Other open springs were either covered over by the government or the bathhouse owners to prevent their pollution. One historic problem that had been plaguing bathhouse design was incorporating cooling towers into the design. The water was so hot coming out of the earth that it could not be used for bathing without being cooled or mixed with cold water. Originally each bathhouse had its own spring to supply water for bathing. Early bathhouse owners resisted a central collection system because the individual springs had reputations for curing certain ailments. Under this system though, one bathhouse could run out of water at peak times while another could have a surplus. In 1888, $31,000 was allotted for the construction of a reservoir and collection system for the springs water, but another bill passed in 1891 authorized the secretary of the interior to build a system "only where such collection is necessary for its proper distribution, and not where by gravity the same can be properly utilized." constructed at such great expense was never used. The cooling towers remained on each of the bathhouses (Cron '46: 220-264).

Senator Logan pushed through legislation that provided one hundred thousand dollars for the construction of an Army and Navy hospital at Hot Springs. An act making appropriations for the support of the Army for the fiscal year ending June thirtieth, eighteen hundred and eighty-three, and for other purposes passed on June 30, 1882 (22 Stat. 121). In regards to the Army and Navy Hospital it provided: “For construction and repair of hospitals, as reported by the Surgeon- General of the Army, seventy-five thousand dollars: Provided, That one hundred thousand dollars be appropriated for the erection of an Army and Navy hospital at Hot Springs, Arkansas, which Establishment of shall be erected by and under the direction of the Secretary of War, in accordance with plans and specifications to be prepared and submitted o the Secretary of War by the Surgeons-General of the Army and Navy; which hospital, when in a condition to receive patients, shall be subject to such rules, regulations, and restrictions as shall be provided by the President of the United States: Provided further, That such hospital shall be erected on the government reservation at or near Hot Springs, Arkansas”. In the summer of 1882, the United States government was making a major public health investment in Hot Springs. Marine Hospital expert and Army Surgeon John S. Billings, along with Medical Inspector Adrian Hudson of the United States Navy, were in Hot Springs to inspect the best site for the proposed Army and Navy hospital. A year after Billing's visit, the interior Department turned over 24 acres of reservation property to the War Department for the hospital site, and construction of the hospital commenced. Although the War Department did not take charge of the Hot Springs reservation, with the construction of the Army and Navy Hospital, it had established a presence in the town. With the hospital's completion in January 1887, the United States Marine Hospital Service also gained a presence in Hot Springs. Wartime structures, including general hospitals, had disappeared after the Civil War and did not return until the Army and Navy Hospital in Hot Springs was opened in January of 1887 (Gillet '95).

In 1887, the first Army and Navy General Hospital was built on the hillside above Hot Springs Reservation. A complex of five buildings was designed by J.L. Smithmeyer at the cost of $100,000. The location of the hospital allowed it to take advantage of the hot water coming out of Hot Springs Mountain. Thermal baths became part of the treatment regiment for many ailments. During this period the Interior Department maintained high visibility as it completed the Arch Creek Project, paved Central Avenue, planted trees in front of the bathhouses, and paved sidewalks. By 1884 the town was host to approximately 40,000 visitors a year. The quarterly report on free baths for the period ending November 30, 1885 reported that 19,846 people from 37 states and territories and 224 listed as foreign

took baths at this government sponsored public health facility. Deputy United States Marshal James L. Barnes, characterized patrons as respectable, but broke (Percefull '06). Federal government officials in Hot Springs began to fulfill Progressive goals in 1890 with the start of construction on a new brick government bathhouse. The city appointed a City Physician in 1895. At this time a group of physicians organized a city dispensary in response to the growing number of impoverished who inhabited the Hot Springs area to give medical advice and free medicines to the needy poor. By 1892 there had been a substantial increase in the number of visitors who received the combination of mercury and bath treatments for syphilis and the annual use of 10,000 lbs of mercurial ointment was reported. In his 1887 guide to Hot Springs, Charles Cutter argued that since the poverty-ridden invalids came to the resort from every State in the Union, the General Government should provide the necessary buildings, food, medicine, medical attention and other necessaries that are necessary to convert these unfortunate people from helpless invalids to good and useful citizens.

In 1892 the War Department detailed Lieutenant Robert R. Stevens of the 6th Infantry to the Department of the Interior to work on landscape improvements for Hot Springs Reservation. Stevens developed the first master plan for the area. Stevens also oversaw the construction and design of the Grand Central Entrance. Flanking the entrance were columns topped with bronze eagles and the balustrade leading up to the stone bandstand pavilion at the top, which were finally completed in 1896. The sidewalk in front of Bathhouse Row between Fountain and Reserve avenues was a wide concrete walk, along which visitors could stop at a series of hot-water drinking fountains "which together with the neatly clipped grass, the rare shrubbery and flowers, the trees and comfortable seats, make it not only a distinctive feature of Hot Springs, but a matter of great convenience and pleasure to invalids." 30 The Noble Fountain, now at the entrance to the Grand Promenade, graced the southwest corner of Bathhouse Row. Two exedra fountains flanked the Grand Central Entrance; the small shell fountain had its niche in Stevens Balustrade below the stone pavilion. The Maurice historic spring had a dripping spring where visitors captured the water off a rock green with algae until it became an enclosed cup fountain. The Block Fountain, shortly replaced by the Hoke Smith Fountain, anchored the northern end of Bathhouse Row near the Arlington Hotel. The superintendent of the reservation was quite pleased with all of Stevens' work and highly praised the landscaping developments in his annual report. He seemed to particularly enjoy the fact that the stone pavilion attracted a "better class of visitors, who find it cool and view the reservation from this somewhat elevated position." drew literally thousands of people who partook of the waters daily. The Army transferred Stevens to Yellowstone National Park in 1895 (Little 1896: 1).

Alonzo Bell, Assistant Secretary of the Interior Department, championed free bathhouses for the invalid poor of the United States and declared the therapeutic value of the springs as priceless. He warned of the dangers of a monopoly on the water if the government instituted leases on the springs and predicted with the fostering care of the United States Hot Springs should become the great national sanitarium of the continent (Percefull '06). In 1878 an estimated 40 percent of seamen suffered from venereal disease (Mullan '89). Statutes of 1891 required that "all buildings to be erected on the Reservation shall be on plans first approved by the Secretary of the Interior, and shall be required to be fireproof, as nearly as practicable." The same series of laws prohibited economic pooling, which increased competition among bathhouses. In reference to the creation of the Hot Springs Army and Navy Hospital the Hot Springs Medical Society stated in 1895: A false impression was gained in some way that this hospital was erected for the indigent sick of the country, with the result that our city was infested with paupers from every state in the Union, hoping to gain admittance to the 'government hospitals' (Percefull '06: 14). Belief that miasma or bad air caused epidemics dictated much of the

government's actions in Hot Springs. Epidemics such as the yellow fever outbreak in Memphis and New Orleans in the 1880s, as well as earlier cholera epidemics in Chicago and other urban centers including Little Rock, Arkansas, convinced local, state and federal public health officials to take action. The miasmatic theory held that animal waste and rotten vegetation along with climate and particularly types of land produced air laden with disease. Federal and local officials in Hot Springs seized the opportunity to clean up any bad air and establish a haven of fresh, healthy air on the Hot Springs reservation (Garrison; 30: 549). Stephen Crane, later known for his novel Red Badge of Courage, wrote a newspaper article on March 3, 1895 mentioning the government sponsored public health facilities at Hot Springs. He focused on the thermal water as medicine, connected its distribution to the federal government and pointed out that the government operated a free bathhouse, where 900 people a day bathed (Herndon '22: 49). In 1896 Polk's Medical Registry and Directory of North America advertised Hot Springs as the only health resort owned, endorsed and conducted by the United States government (Polk '04): 231-232).

During the first two decades of the 20th century both the federal government and the bathhouse owners began intense studies of European bathing establishments to see how Hot Springs could be improved (Greenley 1906). Martin Eisele, was appointed Superintendent of the Hot Springs Reservation in 1900. He felt the federal government should have control of the town of Hot Springs as well as the surrounding area, but his participation in city council and position as a prominent local druggist, blurred jurisdictional lines. A 1903 act prohibited the medical profession from participating in abortions, habitual drunkenness, moral turpitude, false advertising and drumming (a sales technique used by employees of physicians, hotels or bathhouses). The growth of charity health facilities in Hot Springs during this period offers some indication of the increasing number of patients traveling to Hot Springs. Of the five hospitals located in Hot Springs in 1904, two (Army and Navy and the Hot Springs/Garland Co. hospital) operated as federal local public health facilities. Yet another (St. Joseph's) was private charity, and two other (Barry Hospital and the Keeley Institute) were almost certainly at least in part, charity hospitals. Also of the six sanitariums lists in 1904, while only one was public, the Pytian, its capacity was twice that of any of the others. In 1906 Eisele wrote that the general public condemned the federal government for not doing enough for the indigents, while local businessmen complained that the government was in direct conflict and competition with the bathhouses. Eisele proposed to have the bathing interests in Hot Springs come under complete government supervision and control. The Government free bathhouse for the indigent was established pursuant to act of Congress of December 16, 1878. The number of baths given to the poor during the year 1910 was 200,048. The act of March 2, 1911, provides that an applicant for free baths shall be required to make oath that he is without and unable to obtain means to pay for baths, and a false oath as to his financial condition makes him guilty of a misdemeanor and subjects him, upon conviction thereof, to a fine of not to exceed $25, or 30 days' imprisonment, or both (Haywood 1912).

In 1909 the appointment of the first and only medical director of the Hot Springs Reservation, Major Harry M. Hallock, marked a turning point in the government's administration of the reservation. Hallock instituted improvement in the operation of the Government Free Bathhouse and supervised bathhouse sanitation, hydrotherapy and hygiene. While his tenure was short, he capitalized on the goodwill of local authority and instituted measures that greatly enhanced the quality of the bathing industry. Hallock ordered the discontinuation of common drinking cops, hair brushes, and combs; removal of carpets and matting; and replacing drapery with sheets tat could be frequently laundered. Moreover a policy instituted in December 1910 required anyone who was not under the care of a physician to secure a permit for bathing from the Superintendent's offie, reduced the number of non-

registered physicians doing business in Hot Springs. Another piece of legislation enacted by Congress in March 1911 limited bath privileges to those who had ailments that would benefit from thermal water treatment and stipulated that indigents had to swear an oath that they could not pay for bathing before using the Government Free Bathhouse. This new policy drastically cut down on the number of free bathers, and was the first time the government required a free bather to do something in exchange for a bath and thus set a precedent for future demands by public health officer. In 1911 Hallock recommended Congress appropriate money for a new building with examining rooms, a dispensary , emergency war, office accommodation and all forms of equipment for scientific hydrotherapy. Congress did not. On May 17, 1913 Harry M. Hallock, medical director of the Hot Springs Reservation committed suicide (Percefull '06).

In 1914 the Interior Department selected W.P. Parks a physician to be superintendent. He was the first of five officers of the United States Public Health Service to serve as Park Superintendent. In his 1916 report, Superintendent Parks noted that the federal government had allowed several local physicians to institute a free dispensary over the Government Free Bathhouse. Several registered physicians gave their time to work in the clinic from 1:00 pm till 3:00 pom every day except Sunday. However, the government established the clinic mainly to observe the physiological effects of the hot water and its therapeutic value, upon the pulse, temperature and blood pressure. Parks recommended appropriating $75,000 for the renovation of the free government bathhouse and inclusion of a modern clinic. The second program was a massive inoculation campaign, in the case of syphilis, inoculation meant the detection and compulsory treatment of carriers until they were non-infectious (Stokes '26; 1081). The final phase of bathhouse construction was well underway in 1916 when architects George Mann and Eugene John Stern of Little Rock were awarded $10,000 to prepare an overall plan for the development of Bathhouse Row, along the lines of what Greenley proposed to prepare in 1906. Their report was submitted to the secretary of the interior on March 1, 1918. 53 Their Utopian plan even included a "working home for the indigent who came to seek the cure in Hot Springs as well as for the resident poor." The cost estimate that Mann and Stern submitted with their recommendations was $2,000,000 (Mann & Stern 1918: 1-6).

Recognizing the health benefits of spending time in nature, many physicians recommended that people taking the thermal baths should also walk, take a carriage or horseback ride or from 1915 drive an automobile on West mountain. In 1915, Dr. William P. Parks, Hot Springs Reservation Superintendent, implemented the recommendation of the Hot Springs-Garland County Medical Society for a scientific system of mountain climbing called the Oertel System of Graduated Exercise. This therapeutic regimen of graduated hiking and climbing (the terrain cure) was popular at European spas. It is, first of all, a preventive measure and van be employed with advantage to improve the general nutrition of the heart". When the National Park Service was created in 1916 within the Department of Interior, Hot Springs Reservation began reporting to its first director, Stephen T. Mather. With Mather's help, Hot Springs Reservation was re-designated by Congress as the nation's 18th national park in 1921. For several years afterward Hot Springs National Park continued to the most visited of all the national parks, owing to its long reputation as a health destination rather than as a vacation retreat. Stephen T. Mather, the first director of the National park Service, developed a special bond with hot Springs after visiting on an inspection tour in 1915. Often, Mather was found enjoying the treatment offered by the bathhouses instead of attending department meetings. He was a frequent visitor to the springs throughout his life. Mather's devotion helped convince Congress to convert Hot Springs Reservation into a national park in 1921.

On August 25, 1916, Congress established the National Park Service and placed Hot Springs Reservation under its administration, even though it was not designated a National Park and change its name to Hot Springs National Park until March 4, 1921. Congress in 1921 began a debate on whether or not to change the name of Hot Springs Reservation to Hot Springs National Park. Representative James Robert Mann of Illinois argued that the term national park meant a place of unparalleled natural beauty and that Hot Springs did not fall in that category. Representative Chester William Taylor of Arkansas countered by arguing that the present designation for the hot springs as a reservation was inappropriate. Taylor believed that most people thought a reservation was a place occupied by "uncivilized" Indians and this title did not reflect the true nature of the spa facilities available at Hot Springs. On March 4, 1921 Congress passed the name change as a stipulation attached to an appropriations bill and Hot Springs Reservation became re-designated as Hot Springs National Park (Norsworthy '70:.42-43).

By the time the United States entered the First World War in 1917, Hot Springs National Park was ready to play an important role in the government's newly-intensified campaign to control the spread of syphilis. An estimated 13% of those drafted were infected with either syphilis or gonorrhea. In July 1918 Congress enacted the Chamberlain-Kahn Act that created the Division of Venereal disease of the US Public Health Service, one offshoot of this was the creation of a Venereal disease clinic in Hot Springs. A government mandate mobilized the nation's health spas to help returning soldiers who needed long-term medical care. Eventually Hot Springs came under the control of the United States Public Health Service. Within the first six months of 1921, a cooperative agreement between the Treasury and Interior Departments resulted in the transfer of administrative authority of Hot Springs National Park to the Public Health Service. The new United States Free Bathhouse and Venereal Disease Clinic opened on November 14, 1921 (Percefull '06). In 1922 the Department of the Interior began an experiment in managing this unique park. By mutual agreement, the superintendent for Hot Springs National Park was detailed from the Public Health Service. This experiment continued until 1936 when Thomas J. Allen became the first superintendent selected from the National Park Service. After the hotel burned on April 5, 1923, and the hotel owner's reservation lease expired in 1932, the National Park Service turned the vacant lot into a landscaped park (Scully '66: 110-111).

While the presence of some government sponsored public health facilities added to the reputation of the thermal water of Hot Springs, government-sponsored public health facilities in Hot Springs were never significant enough to address the health needs of the nation's invalid poor. Historians generally agree that public health in the United States developed a mission that emphasized largely avoidance and, later, prevention of diseases – not treatment. Military culture and commercial interests greatly dominated the development of public health in the United States. In the late decades of the nineteenth and early twentieth ventures, the rise of germ theory and the discovery of useful vaccines steered the focus of public health in the United States toward disease prevention while treatment took a back seat (Tomes 98). Hot Springs developed as a major United States Public Health Service treatment center for syphilis after 1921 (Wenger '81: 98). By the time the Interior Department in 1921 agreed to appoint officers of the United States Public health Service to serve as superintendents of Hot Springs National Park, the image of Hot Springs as a national health resort already stretched back almost a century. Many Americans in 1921 still valued hot and cold springs and mountainous terrain as healing agents and more than ever viewed the government-owned thermal springs of Hot Springs, Arkansas, as beneficial in the treatment of syphilis, a major problem disease of the time. Furthermore the government's ownership of the hot Springs property, as well as its interest and involvement in the area from 1832 forward, encouraged the public to see Hot Springs as a place to go where the United States

government would provide free medical treatment to its people. The United States Public Health Service administrative control of Hot Springs National Park strengthened the Hot Springs myth. However the myth eroded throughout the 1930s as the government failed to deliver truly federally sponsored public health facilities, but instead continued to rely on private charity that was inadequate to accommodate the large numbers of indigent syphilitics who continued to arrive in Hot Springs (Percefull '06).

The onset of the Great Depression in 1929 resulted in a dramatic increase in national unemployment and social upheaval, with the full impacts occurring in 1933 and 1934. The bathhouse owners found it increasingly difficult to make enough profit to justify remodeling and rehabilitation projects. Visitation to the park increased, but fewer people took the baths. One notable exception was the increased demand for use of the Government Free Bathhouse by people displaced by the depression. Meanwhile, the National Park Service used funds from various New Deal programs to develop recreational and natural aspects of the park. The Army and Navy facility on the mountain above Bathhouse Row needed expansion because of the large number of World War I veterans who could benefit from treatments offered at Hot Springs. The new veterans' hospital completed in 1933 dwarfed the buildings on Bathhouse Row but complemented the size of the Eastman Hotel directly south of it. Thomas C. Vint wrote the Park Director: The spring area as it now stands is an entirely artificial development and on account of the large use of the water it would be impractical to consider the restoration of the springs to approximately their natural condition as we would do according to the usual National Park practice. Special conditions . . . make it necessary for use to consider an artificial, rather than a natural theme for its development. . . . Both of these developments [Bathhouse Row and the Army and Navy Hospital] have rather monumental types of buildings, the architecture of which will dominate this particular area. It is logical therefore that we provide a formal development for this particular section of the park. Another feature was the possibility of providing a wide promenade along the rear of Bathhouse Row (Tweed et al '77: 48-51).

The Grand Promenade was first proposed in 1931 as a path from Reserve Street to Fountain Street for visitors to enjoy after bathing. Work began in 1933, and by 1938, a gravel path form the Stevens Balustrade to the south end was in place. Installation of brick pavers was completed by 1942. The project stopped for the next fourteen years due to lack of funding. By 1957 the southern end of the Promenade was complete, and Noble Fountain was moved in front of the Administration building. During 1938, a hydraulic engineer began studying how to cool the hot spring water while keeping it out of contact with the air so that any properties the water possessed would not be lost. Bathhouse operations continued along smoothly, and the series of regulations governing their operations expanded. Bath hall temperatures were required to be between 95 and 100 degrees, pack rooms between 100 and 105 degrees, cooling rooms between 80 and 88 degrees; if a second cooling room existed, it was to be 10 degrees cooler than the first (Paige & Harrison '87 : 99-100).

The Japanese attack on Pearl Harbor on December 7, 1941, and the subsequent entry of the United States into World War II brought further dramatic changes to Hot Springs National Park. Many doctors and bathhouse employees either voluntarily joined or were drafted into the military services. The hospital was selected to the Army's Arthritis Venter in the 1940s. At the hospital soldiers were also treated for polio (poliomyelitis) using the first therapeutic pool filled with thermal water from the springs. Patients at the hospital were encouraged to exercise along the numerous trails on the reservation. They entered the reservation grounds through the gate at the Carriage Road, now called the Army and navy Gate. Each military services is represented by a canon or an anchor symbol on the

gate. The original wooden hospital was removed and replaced in 1933 with the masonry structure there today. The military took over the enormous Eastman Hotel across the street from the Army and Navy Hospital in 1942 because the hospital, now a decade old, was not nearly large enough to hold the wounded and sick coming in. The military constructed a passageway over Reserve Avenue to connect the two facilities. Despite wartime problems, visitation and use of the bathhouses increased during the war years. In 1944 the Army began redeploying returning overseas soldiers; officials inspected hotels in 20 cities before selecting Hot Springs as a redistribution center for returning soldiers. In August of 1944, under the command of Colonel John P. Wheeler, the Army took over most of the hotels in Hot Springs for the redistribution program. The Army planned to reassign 2,500 officers, enlisted men, army nurses, and WAACs a month to Hot Springs for processing out of the service. The redistribution center officially closed down in December 1945 after processing more than 32,000 returning soldiers. 80 In 1946, after the war, the Eastman was demolished when the federal government no longer needed it (Paige & Harrison '87: 99-100).

The hotels reconverted to civilian use and opened in early 1946 to large crowds of visitors. In that year, people took 649,270 tub baths, which established a new record for the bathhouses. This proved to be the apogee of the bathing industry. Modern antibiotics developed during the war diminished the use of the thermal waters for medical purposes. During the post-war years visitation to the park increased, but visitation to the bathhouses declined after 1946 (Tweed et al '77: 48-51). The Army and Navy General Hospital closed in 1955, and the building was home to the Arkansas Career Training Institute until it was closed in 2020. Americans began participating more in various recreational activities and moved away from the social promenading of the spas. Younger people took single baths, but showed little interest in taking a series of baths. By 1979 only 96,000 baths were given on Bathhouse Row (Ellis '80: 1). The Fordyce Bathhouse closed in 1962, and the Maurice Bathhouse closed in 1974. Then in an 11-year time span - starting in 1974--the Superior, Hale, Ozark, Quapaw, and Lamar shut their doors. In 1986, only the Buckstaff remained open on Bathhouse Row (Paige & Harrison '87: 102). Subsequently the Quapaw reopened.

The National Park Service contracted with the Edward B. Mooney Construction Company to drill a test well in Whittington Park to determine if a cold water source existed for the development of a water cooling system. The testing proved the cooling system development feasible, and in the next 33 several years NPS engineers designed a suitable cooling system. On March 11, 1949, the William Peterson Company began construction on a 100,000-gallon hot water reservoir and central cooling system. Plans called for the new reservoir to be next to the 400,000-gallon reservoir on the west slope of Hot Springs Mountain. The water cooling system worked by circulating the thermal water from the new reservoir through subterranean pipes in the Arlington Lawn where pipes filled with cold spring water and Hot Springs Creek water coiled around the hot water pipes. The heat exchange from this operation cooled the thermal water to 90 degrees, and the water then flowed to the 400,000-gallon reservoir and from there to the bathhouses. At the bathhouses, hot thermal waters and cooled water mixed to create baths of 100 degrees. The total cost of the project approached $140,000, with completion in early 1950 Paige & Harrison '87: 119).

6. Medicinal Bathing

The practice of traveling to hot or cold springs in hopes of effecting a cure of some ailment dates to prehistoric times. Archeological investigations near hot springs in France and Czechoslovakia revealed Bronze Age weapons and offerings. In Great Britain, ancient legend credited early Celtic kings with the

discovery of the hot springs at Bath, England. Many European, Mideastern, African, Australian, North American, South American, Central American, and Asian peoples believed that bathing in a particular spring, well, or river resulted in physical and spiritual purification. Forms of ritual purification existed among the native Americans, Persians, Babylonians, Egyptians, Greeks, and Romans. Today, ritual purificiation through water can be found in the religious ceremonies of Jews, Mohammedans, Christians, Buddhists, and Hindus. These ceremonies reflect the ancient beliefs in the healing and purifying properties of water (Martin '39: 134-135).

All Roman bathhouses contained a series of rooms which got progressively hotter. Most contained an apodyterium--a room just inside the entrance where the bather stored his clothes. Next, the bather progressed into the frigidarium (cold room) with its tank of cold water, the tepidarium (warm room), and finally the caldarium (hot room). The caldarium, heated by a brazier underneath the hollow floor, contained cold-water basins which the bather could use for cooling. After taking this series of sweat and/or immersion baths, the bather returned to the cooler tepidarium for a massage with oils and final scraping with metal implements. Some baths also contained a laconicum (a d r y , resting room) where the bather completed the process by resting and sweating. Roman bathhouses often contained a courtyard, or palestra, which was an open-air garden used for exercise. Sometimes the palestra held a swimming pool (Inkersley 1895). The Romans also developed baths in their colonies, taking advantage of the natural hot springs occurring in Europe to construct baths at Aix and Vichy in France, Bath and Buxton in England, Aachen and Weisbaden in West Germany, Baden in Austria, and Aquincum in Hungary, among other locations. Romans used the hot thermal waters to relieve their suffering from rheumatism, arthritis, and overindulgence in food and drink. The decline of the Roman Empire in the west, beginning in A . D . 337 after the death of Emperor Constantine, resulted in Roman legions abandoning their outlying provinces and leaving the baths to be taken over by the local 4 population or destroyed (Martin '39: 137-144).

Ecclesiastical officials believed that public bathing created an environment open to immorality and disease. Roman Catholic Church officials even banned public bathing in an unsuccessful effort to halt syphilis epidemics from sweeping Europe (Martin '39: 143-145). In an age of religious fervor, the benefits of the waters were attributed to God or one of the saints. In 1326 Collin le Loup, an ironmaster from Liege, Belgium, discovered the chalybeate springs of Spa in Belgium. Around these springs, a famous health resort eventually grew and the term "spa" came to refer to any health resort located near natural springs. During this period, individual springs became associated with the specific ailment that they could allegedly benefit. By the 16th century, physicians at Karlsbad, Bohemia, prescribed that the mineral water be taken internally as well as externally (Fraser 1890: 516-517).

In 1797 in England Dr. James Currier published The Effects of Water, Cold and Warm, as a Remedy In Fever and Other Diseases. This book stimulated additional interest in water cures and advocated the external and internal use of water as part of the curing process (Buckman '79: 9). A cholera epidemic in Liverpool, England in 1842 resulted in a sanitation renaissance--more people bathed and washed their clothes. That same year a house in Cincinnati, Ohio, received the first indoor bathtub in the United States. Bathing, however, was still not a universal custom. Only one year later—in 1843--bathing between November 1 and March 15 was outlawed in Philadelphia, Pennsylvania, as a health measure, and in 1845 bathing was banned in Boston, Massachusetts, unless under the direct orders of a physician. The situation improved, however, and by 1867 in Philadelphia most houses had tubs and indoor plumbing. In England, hot showers were installed in barracks and schools by the 1880s (Martin

'26: 46). The emphasis on drinking the waters rather than bathing in them led to the development of separate structures known as Trinkhallen (drinking halls)(Fraser 1890:516-517).

By the 1760s British colonists were traveling to hot and cold springs in Connecticut, Pennsylvania, New York, and Virginia in search of water cures. Among the more frequently visited of these springs were Bath, Yellow, and Bristol Springs in Pennsylvania; Saratoga Springs, Kinderhook, and Ballston Springs in New York; and Warm Springs, Hot Springs, and White Sulphur Springs (now 20 in West Virginia) in Virginia. Colonial doctors gradually began to recommend hot springs for ailments. Dr. Benjamin Rush, American patriot and physician, praised the healing virtues of the springs of Bristol, Pennsylvania, in 1773. Dr. Samuel Tenney in 1783 and Dr. Valentine Seaman in 1792 examined the water of Saratoga Springs in New York and wrote of possible medicinal uses for the springs. Hotels were constructed to accommodate visitors to the various springs. Entrepreneurs opened taverns where the travelers could lodge, eat, and drink. Thus began the health resort industry in the United States (McClellan '59). After the American Revolution, the spa industry continued to gain popularity. By the 1850s hot and cold spring resorts existed in 20 states. Saratoga Springs in New York had extensive architectural development by the 1830s--a time when the buildings of Hot Springs, Arkansas, were small log and frame structures without particularly distinctive detailing--just basic envelopes to keep occupants from the weather. By 1815 Saratoga had large, four-story, Greek revival hotels. Hot Springs, Arkansas, became a major resort in the Midwest as the railroad opened up the Arkansas resort for people from the large metropolitan areas of St. Louis and Chicago. The popularity of the spas continued into the 20th century. Some medical critics, however, charged that the thermal waters in such renowned resorts as Hot Springs, Virginia, and Saratoga Springs, New York, were no more beneficial to health than ordinary heated water (Hutchinson '13: 169).

During the 1820s crude vapor baths stood over the springs, and bathers breathed in the vapors for extended periods of time. A bather coming to the hot springs either set his own regimen of vapor and pool baths or took the advice from other bathers. Some patrons spent only a few hours in the hot water; others lay in Hot Spring Creek day and night. During the 1830s a few of the bathhouses offered patrons wooden tubs. A visitor to a bathhouse in 1834 found the building divided into two portions. The first served as a place to undress; the second room, constructed over a hot springs, consisted of benches placed over a floor of 2-inch-wide boards set 2 inches apart. Steam from the springs rose through these separations. A person remained in this steam room for 30 to 40 minutes and received a dousing with cold water when he reentered the dressing room. After taking this steam bath in the morning, the bather usually took a water bath in a tub or the creek during the afternoon. One writer on the benefits of the hot springs wrote in 1841 that two vapor baths were required each day, the first coming before breakfast. He warned that one should neither stay in the bath longer than 15 minutes nor in water over 104 degrees. Some individuals did not take the entire bath, but placed their affected arms or legs in a pool or in rushing water to get relief. Other advice in area newspapers included the assertion that the best times to visit the hot springs were from March 1 to July 1 and from September 1 to January 1. Another authority recommended that after one or two months of bathing a respite of some time was necessary before continuing with the baths (Scully '66: 38-39).

Starting in the 1850s physicians began taking up permanent residence in Hot Springs, although many visitors did without their services. By the late 1850s a series of troughs brought the water to the bather as he reclined in a wooden tub. A series of levers and wooden blocks released hot and cold water until the desired temperatures were achieved. Also showers came into use, which allowed hot water to cascade down on the bather from above and, preferably, on that portion of the body needing treatment.

During the bath the bather drank thermal water as part of the cure. Bathers remained in Hot Springs from one week to two months taking baths. A few changes occurred in the bathing regimen after the Civil War. Each bather brought two towels, a flannel bathing suit, a tin cup, and a bucket capable of holding two quarts of hot water to the bathhouse. Bathers undressed in one room and proceeded to another room to take a tub bath for 15 to 20 minutes. By the 1870s some bathhouses recommended only three minutes for the hot bath, and a three-minute timer stood by the tub. Next came the steam bath in which the bathers remained for as long as they could stand the heat--usually six to eight minutes. During the bathing regimen, they constantly drank the hot water. After the steam bath, they went back to the dressing room where a bath attendant wrapped them in blankets. Then they walked back to their hotel or boardinghouses where they rested for 30 minutes under the blankets. The bathers were warned not to fall asleep as this was considered dangerous (Scully '66: 41, 54).

At Ral Hole a hot water pool had a mud bottom and was channeled to a lower pool for cooling. The bathers took off their clothes in the woods nearby and entered the lower pool slowly, going in deeper as they got used to the water temperature. After 10 to 20 minutes they returned to the bank and plastered themselves with mud. They lay for several hours with the mud pack on before returning to the pool and washing themselves off. Sometimes 20 people crowded into this pool for a bath. Men used the pool during the afternoon and women bathed there in the morning (Scully '66: 40-41). By the mid-1870s the bathing regimen became more diverse, and physicians prescribed various types of baths for patients. Physicians prescribed specific times and manners for a person to bathe, steam, and lie in pack blankets. Visitors were cautioned against taking the water without a doctor's advice. The period of time for tub baths became six to 10 minutes and the time in the steam bath shortened to two minutes; only one bath regimen took place each day. The water mixture for the tub baths consisted of two parts cold water to one part hot water. In 1878 the first superintendent at Hot Springs, Benjamin Kelley, established regulations for bathing. Kelley closed Ral Hole for bathing, and later the first Government Free Bathhouse operated at the site. Also he recorded the types of tubs in use at Hot Springs. His 1881 inventory of bathhouse equipment lists zinc-, slate-, iron-, wood-, and copper-trimmed tubs in use during the bathing regimen. Two years later porcelain tubs were in use at a few bathhouses. In addition, the bathhouses offered electric baths and mercurial vapor baths (Hamblen 1883).

Bathhouses began using vapor cabinets around 1884. The bather sat in the cabinet with the lid closing tightly around the neck. Vapor from the hot water rose through the floor of the cabinet. Most of the bathhouse bathing attendants kept the temperature of these cabinets around 110 degrees and tub baths at 98 degrees. A few bathhouses preferred to keep the vapor baths at more than 130 degrees. The bather sat in the cabinet from 10 to 20 minutes. The bather also received a douche of hot water poured or sprayed on an affected area of the body. This usually occurred with the bather in the tub. Physicians recommended that bathers take the baths early in the morning and on an empty stomach (Baird 1889). Russian and Turkish baths, and in the 1890s German needle baths and Scotch douches were added to the types of water treatment available. By this time bathhouses offered separate bathing facilities for men and women. Earlier, men and women had bathed at different times. Another change in the bathing regimen was the use of a cooling room for bathers. Most of the bathhouses opened each day seven days a week. They offered bathers the option of purchasing tickets for one, five, 10, or 21 baths. Twenty-one baths, which took three weeks to complete, were considered appropriate for one stay at an American spa. Government regulation of the bathhouses controlled the bathing regimen in only the broadest manner. These regulations set the manner and sale of bath tickets, the sanitary conditions of the bathhouses, and the economical use of the thermal water by the bathhouses. At the end of the 19th century the bathhouses all used porcelain-lined or solid porcelain tubs (Scully '66: 168).

At the beginning of the 20th century Superintendent Eisele acted to increase government control over the bathing regimen. A federal board of medical commissioners inspected the bathhouses in 1903 and found a number of unsanitary conditions. The board found that the laundry facilities of the bathhouses were inadequate to sterilize the towels and robes, that syphilitic patients and others drank hot water from the same glasses, that toilets were not properly cleaned after use by patients suffering from venereal diseases, and that bath attendants passed contagious disease from one patron to the next (Drennen 1903). In February 1903 the Arkansas state legislature passed an act granting jurisdiction over a portion of the Hot Springs Reservation to the federal government. Eisele took advantage of this act to develop and promulgate new regulations for the bathhouses. These regulations set the responsibility and fees collected by the bath attendants, stipulated that bathers furnish bath towels and robes, and required the bathhouses to keep bathing facilities and toilets in a sanitary condition. In addition, the regulations required the bathhouses to provide a safe place for bathers' jewelry, money and other valuables (Eisele '1904).

The federal government began providing free baths for poor people after 1878 by building a frame bathhouse over the popular “mud hole” spring, and continued to provide free baths for indigents until 1956. During the early 1880s people who could afford to pay also bathed there, believing the water to be superior. Everyone—black, white, male, or female—had equal access to this bathhouse, but because the spring flow there was not very strong, two or three hour waits for a bath were common. In 1890, the Independent Bathhouse opened for “Colored Persons” to allow its patrons to bathe at any hour of the day. Unfortunately, it operated as an African American bathhouse for less than a year. The Government Free Bathhouse was open to segregated bathing at any time, but its patrons had to sign an affidavit, stating they were indigent, or poor, to use its services. The government erected a new brick free bathhouse on this site in 1891. Remodeled in 1898 on a sexually and racially segregated plan, the bathhouse nevertheless gave indigent black and white bathers equal access to the facilities. In 1921 a new government free bathhouse opened its doors to the public. It, too, was segregated by sex and race with separate facilities for black women, white women, black men, and white men. After 1956, indigent black bathers were sent to the Pythian Hotel Bathhouse and the National Baptist Sanitarium and Bathhouse. Racial integration of the Park bathhouses did not happen until the passage of the Civil Rights Act in 1964.

Just as their white counterparts did, African American visitors came to Hot Springs to bathe in the thermal waters for their health, from the its earliest days. Segregation laws allowed bathhouses to deny or limit African American access to bathing facilities. While African Americans could work as attendants in most of the bathhouses, they were not allowed to bathe in all of them. Only whites were allowed to bathe in the mornings at the bathhouses. Throughout the history of segregated bathhouses in Hot Springs, African American were denied equal access to the white bathhouses despite providing the majority of labor in these facilities. Bath attendants are referred to in local bath records as early as 1875. By the early 1900s, their specified duties included cleaning the bathing areas, helping invalids, laundering patients' bath robes and administering mercury rub treatments. Beginning in 1910 , the government employed a doctor to serve as medical director of the bathhouses and changed attendant regulation to the lessen some of the previous responsibilities. The medical director began classes in 1910 to instruct the bath attendants on physiology, hygiene and first aid. In the 1930s and 1940s park officials continued to conduct training courses for bath attendants and publish lists of registered physicians. Bath attendants received a course of instruction followed by an examination before they could work in one of the bathhouses. In addition, they took monthly physical examinations to make

sure that patrons were not exposed to contagious diseases. A federal registration board gave a written exam to any doctor wishing to prescribe bathing in Hot Springs. This was done to ensure the quality of the spa community (Patraw '49: 19).

The actual bathing regimen consisted of an individual entering the bathhouse and going to the purchasing counter. The patient purchased a ticket, stored valuables, and gave the doctor's bathing instructions to the counter person. The bathing instructions were passed on to the attendant and the bather was shown to a changing room to undress. After undressing and going into the bath room, the bather immersed himself in a tub of hot water between 96 and 98 degrees Fahrenheit. The bath attendant carefully watched a thermometer to keep the temperature constant and gradually raised it to 99 degrees. While in the tub, the patient drank warm water and received a rub with the bath mitt, which had coarse fiber on one side to stimulate the skin. Upon removal from the tub, the patient spent a short time in a vapor cabinet and sitz bath if prescribed by the physician. Next, the bather proceeded to the 115-degree pack room, after which he went to the cooling room for a tepid needle shower and then a light massage and alcohol rub. In 1944 the bathhouse managers requested and received permission to furnish all towels for bathing. The next year the bathhouse managers decided to close on Sunday. In 1946 the Quapaw Bathhouse constructed a small laundry in the basement to wash towels, sheets and other items. Soon most of the other bathhouses began to operate laundries. 29 In the late 1950s and early 1960s the bathhouses began installing whirlpool equipment on their bathtubs. This equipment moved the warm water rapidly around the bather to provide a more relaxing bathing experience and relief for muscles and joints (Scully '66: 128-129). The bathing regimen gradually changed, with doctors' prescriptions being replaced by a generic one recommended by the park. In 1980 John Bannon Albright, a travel reporter for the New York Times, took a bath in the following manner. He spent 20 minutes in the bathtub and then received a rubbing with a bath mitt. Next he spent two minutes in a steam bath and 15 minutes wrapped with hot packs. Finally he rested in a cooling room for 20 to 30 minutes before dressing. These procedures are representative of the bathing regimen in the 1980s. All bathhouses are supposed to offer showers, steam cabinets and sitz baths (Albright '80: 6-7).

The waters of Hot Springs have always had a reputation for treating rheumatism, arthritis, paralysis, and neuralgia. A man named Dean was brought to the springs in 1827, in a wagon, who had been incapable of motion for three months--in six weeks time he completely recovered, and at an ..ejection held at the time made one of the hardest kind of fights. By the 1840s patients took vapor and tub baths to cure their stiff joints. One patient who threw away his crutches after seven days of bathing claimed that the ideal water temperature for a cure was between 95 and 100 degrees. Hot douches became popular in the 1850s. This consisted of a hot stream of water being focused on a specific part of the body, such as a leg or shoulder, for half an hour or longer. Scientific experts claimed that the baths cured joint diseases by stimulating the blood to circulate faster and clean out dead and poisonous materials around the joints. By the 1870s the rheumatic or arthritic patrons who came to Hot Springs took the standard tub and steam bath regimen to effect a cure. The procedure for treating rheumatism and other joint diseases changed slightly in the 1880s as physicians began prescribing medicine such as quinine and benzoate of lithia along with the baths. One Hot Springs physician found the thermal waters of little value for the relief of rheumatic gout or rheumatic arthritis; other physicians highly recommended the water for those ailments. Hot Springs physicians generally agreed that the hot waters relieved the pain of gonorrheal rheumatism. Unknown to 19th century physicians, this relief provided only a temporary respite from the disease (Scully '66). Rheumatism ranked second to syphilis in the reasons why people came to Hot Springs in 1885. Many testimonials from the departure register of the Government Free Bathhouse describe how an invalid came to the springs crippled and left in good

health. Doctors claimed that the hot water stimulated all bodily functions and this effected the cure (Allan '85: 11).

In the summer and fall of 1876 J.L. Gebhart, a Hot Springs physician, examined the thermal water to determine its medicinal value, and discovered a slight electrical impulse in the thermal water. John C. Branner published the results of his investigation of the geological formation around the hot springs in 1888, he disputed that there was any sign of electricity. Dr. Betram B. Boltwood of Yale University made a new discovery in 1904. Boltwood received authorization from the secretary of the interior to examine the hot springs for any indications of radioactivity. He found the thermal waters to be radioactive and believed the radioactivity came from radon gas. Hot Springs newspapers claimed that the radioactivity was the miraculous element in the thermal water that had cured so many people. The question of the exact amount of radioactivity in the Hot Springs water continued to be raised. The American Medical Association, in an editorial, requested that the United States government further investigate the matter. Herman Schlundt, a professor of chemistry at the University of Missouri, conducted an examination for radioactivity at the hot springs in 1932. The testing conducted over several days time found the radioactivity of the springs to range from 0.11 to 3.31 millimicrocuries per liter. R.H. Arnt and P.E. Damon, using more precise instruments, studied the waters for radioactivity in 1952. In addition, the waters were studied for radioactivity in 1953 by Dr. P.K. Kuroda. Kimio Noguchi of Japan tested the radioactivity of the water in 1961. These tests proved that the thermal springs contained some radioactivity. The exact relationship between the radioactivity and the cures obtained at Hot Springs remains unknown and unproven (Paige & Harrison '87: 183-185).

The first decade of the 20th century resulted in two discoveries that bolstered Hot Springs' claim to curing rheumatism. First came the discovery of traces of lithium in the thermal water. This chemical helped relieve the suffering of gouty and rheumatic persons. Second, testing of the thermal waters in 1904 by Dr. Robert Boltwood revealed indications of radioactivity in the thermal water. Physicians believed that radioactivity helped stimulate metabolism and gave relief to arthritic and rheumatic (Hayward 1902: 78). In 1956 the bathhouse managers agreed to create a Hot Springs National Park physical medicine center to concentrate physical therapy and add physical therapy practices prevalent in hospitals. The number of government free baths had declined to the point that it was much more economical to have medical examinations done by private physicians and have the baths distributed among the commercial bathhouses. The physical medicine center opened in 1958 and took over most of the responsibility for treating arthritis, rheumatism, and other joint diseases. Called the Libbey Memorial Medicine Center, it used whirlpool baths, massage, and water exercise in treating muscle and joint diseases (Scully '66: 218).

No truly effective means of controlling syphilis or gonorrhea came before the advent of sulfa drugs in the late 1930s. Large doses of mercury and iodides of potassium often led to serious complications, such as loss of teeth, fissures of the tongue, and hemorrhaging of the bowels. When symptoms (temporarily) disappeared, doctor and patient believed that a cure had occurred. Instead, the diseases merely were dormant or attacking a different part of the body. The thermal waters of Hot Springs, however, gained a reputation in the early 19th century for curing venereal disease. Treatment for syphilis in the 19th century included taking mercury. Sometimes people took mercury orally, and at other times it was rubbed into the skin or injected by needle. People came to Hot Springs to remove mercury from their bodies. Physicians at this time believed that the mercury somehow combined with the toxins of the venereal disease and then needed to be flushed from the body. The physicians believed that the baths at Hot Springs more effectively removed mercury from the body than the conventional

means of expelling the chemical. Patients bathed in the hot water until salivation began, which signaled the body's expulsion of the mercury. When the bathhouses on Bathhouse Row became regulated, they were prohibited from bathing a person with an open sore or drainage. Private physicians had to see to the corrections of the active stages of the disease before the baths could be taken. The major difference between normal venereal disease treatment and the treatment at Hot Springs was that doctors prescribed up to tenfold the usual amount of mercury (Morton 1918: 756-758). By the 1890s the majority of people who came to Hot Springs hoped to obtain a cure for some form of venereal disease. They usually stayed for six weeks to three months but many complained that after leaving Hot Springs their symptoms reoccurred. Treating venereal disease continued to be a major activity for physicians in Hot Springs during the first three decades of the 20th century, and the U.S. Public Health Service-operated Camp Garaday concentrated on treatment and control of these diseases. In the 1940s penicillin and other drugs replaced the use of thermal water as a treatment for venereal diseases. Antibiotics eliminated the need for the patient to expel the chemical from his body. In the final analysis, the thermal water provided only a temporary respite and not a cure from these diseases (Thompsom 1892:49-51). Due to descriptions of immaculate contraction of syphilis there is reason to believe that many people, inclined to apply for a free bath, afflicted chigger and bug bites on their genitals, were misdiagnosed with syphilis and possibly subjected to toxic mercury treatment that would mimic the neurological impairment of third stage syphilis.

Those suffering from consumption most often found that the thermal waters and vapor baths only aggravated their conditions. Within a few years, people suffering from consumption received warnings that drinking the waters at Hot Springs might result in death. Throughout the 19th century those suffering from lung diseases were discouraged from seeking a cure at Hot Springs--with two exceptions. The Missouri Pacific Railroad encouraged those suffering from "la grippe" to convalesce in Hot Springs for a week or two. Also, drinking the thermal waters reportedly helped one abstain from using tobacco. Physicians in the early 1860s recommended drinking the thermal waters for people with various stomach ailments. They maintained that the water contained minerals that neutralized the body's natural acidity and promoted healing. that the water helped cure any number of liver diseases, including alcoholism. Some physicians prescribed the thermal water for diseases affecting the heart and brain, and other physicians warned people with heart and brain diseases to avoid the thermal baths (Garnett 1874: 40-41). At the beginning of the 20th century interest developed in treating heart diseases at Hot Springs. Several bathhouses, including the Maurice and Buckstaff, began using the Nauheim bath to treat those with cardiac and vascular diseases. The Nauheim bath consisted of a thermal bath with added chemicals to create a saline solution. Once the patient became immersed in the water, carbon dioxide was pumped through the water, helping to create a condition which drew the blood to the peripheral parts of the body. This alleviated strain on the heart and allowed the heart to contract and rest. Patients strengthened their hearts by using these various courses on Hot Springs Mountain. The trails eventually fell into disuse, but a few concrete markers can still be found along park hiking trails. 54 In the 19th and 20th centuries hot water baths were considered beneficial in the treatment of kidney diseases (Nash 1947: 20).

Physicians also claimed thermal bathing was helpful for diarrhea, dysentery, nervous disorders, eye diseases, Bright's disease, circulatory diseases, hay fever, diabetes, spinal diseases, blood diseases, poisoning, sterility, menstruation problems, hair restoration, tonsillitis, migraine headaches, ringworm, locomotor ataxia, high blood pressure, insomnia, sore throat, cholera, malaria, skin diseases, measles, obesity, and gall bladder problems. In addition, physicians prescribed thermal baths as a general health tonic. Physicians did not recommend the water for cancers or pregnant women after the 10th week.

They believed that the warm baths could induce a natural abortion (Garnett 1874: 40-44). When cholera broke out in the southern part of this country in 1892, people were advised to travel to Hot Springs because of the purity of the thermal drinking water. Alum Springs became a favorite spot for people to wash their eyes and drink the water for sore throats. Doctors treated malaria by ordering the patient to bath in the warm water and drink large dosages of quinine. They believed the thermal water helped activate the protozoan Plasmodium to begin procreating when they would be vulnerable to the quinine. Obesity was treated with baths and diet (Field 1888).

The only expense to first bathers at Hot Springs was the outfitting required to get to the hot springs and camp there while they took the baths. The first commercial developments consisted of cabins and sheds rented out to seasonal visitors for lodging. Stores followed shortly, to supply the needs of the bathers. In 1830 Asa Thompson charged one dollar for a series of baths in a wooden tub at his bathhouse. The bathhouse operators continued to charge whatever price they wished for the next 47 years. This changed dramatically with the arrival of the Hot Springs Commission in 1877. He held, the charges at the best bathhouses were fifty cents per bath. this rate is too high. The best baths should not cost over twenty to twenty-five cents each, and a condition should be put into the leases that they should not cost more than this sum. By 1879 Superintendent Kelley had established water rates ranging from $40 to $100 a year on the bathhouses, hotels, restaurants, and stores. In November of 1880 the bathhouse owners formed an economic pool known as the Hot Springs Bath House Association. This pool fixed rates for the 21-course baths. The pool received all money collected for bathing, and every six months the pool distributed the money to the individual bathhouses based on the number of tubs in each. The stated purpose of the pool was to stop the evil of drumming — bathhouse owners employing people to solicit customers for their particular bathhouse (Paige & Harrison '87: 125-126).

In 1881 Secretary of the Interior Samuel J. Kirkwood issued an order stipulating that no bathhouse could charge more than $.30 per bath. Within the next few years the government established a water charge of $15 a year per tub, with each bathhouse limited to a maximum of 40 tubs. By the late 1910s the cost of bathing rose to between $7 and $12 for a course of 21 baths. Also, the bather paid a fee of $3 per course to the bath attendant. The cost of bathing gradually increased over the next decades. The bathhouses proved profitable to their stockholders and declared yearly dividends. 64 The economic situation for the bathhouses changed dramatically with the onset of the Great Depression in 1929. The bathhouse owners appealed to the superintendent of Hot Springs National Park and to the director of the National Park Service to reduce the water rates from $80 per tub to $60. The government had raised the water rates from $60 to $80 in 1919. The increased business at the bathhouses continued until 1946. That year represented a peak for the bathing industry. In 1946, bathers purchased more than 1.2 million bath tickets for multiple baths on Bathhouse Row. This number declined in the next two decades, and by 1964 bathers purchased only 400,000 baths (Paige & Harrison '87: 127-29).

The Government free bathhouse for the indigent was established pursuant to act of Congress of December 16, 1878 (Haywood '1912). 1893 Superintendent William Little found the bathhouse for the poor in need of minor repairs. He intended to take action against those applying for permission to use the free bathhouse who were not truly indigent. Little required each applicant at the free bathhouse to respond in writing to a series of questions. He evaluated these responses to determine if the person was indigent. If the person was found needy, a ticket for 21 baths would be issued. This procedure brought strong protest to the secretary of the interior; some people complained that this barred many deserving people from the baths because they had too much pride to claim to be paupers. Despite these restrictions, the number of those seeking baths continued to increase. The crowds at the free bathhouse

caused a number of health problems and complaints about the sanitary conditions there. Superintendent Little countered these complaints by establishing a procedure by which the bathhouse opened at 6:00 a.m. and remained opened until 12:30 p.m. Then the attendants drained the pools, ventilated the rooms, refilled the pools, and reopened at 2:00 p.m. While the pools were in use, a constant stream of water ran through them. The bathhouse remained opened until 6 p.m. when it closed and the pools were drained and the building cleaned, scrubbed, and disinfected. On Wednesdays from 2:00 p.m. to 6:00 p.m. the bathhouse closed and visitors took tours of the building. In 1898 the second story of the free bathhouse was refitted to serve as a free dispensary. Doctors from the Army and Navy Hospital examined patients and prescribed for them free of charge. At first, the operation lacked sufficient medicine, but the superintendent hoped to raise funds from public contributions to pay for additional medicine. The dispensary remained open for two years until reassignments at the Army and Navy Hospital left the dispensary without a doctor (Paige & Harrison '87: 132-33).

The number of baths given to the poor during the year 1910 was 200,048. The act of March 2, 1911, provides that an applicant for free baths shall be required to make oath that he is without and unable to obtain means to pay for baths, and a false oath as to his financial condition makes him guilty of a misdemeanor and subjects him, upon conviction thereof, to a fine of not to exceed $25, or 30 days' imprisonment, or both (Haywood 1912). During the depression, the use of the free bathhouse and government clinic continued to grow. In 1936 Congress increased the penalties for falsely swearing a pauper's oath. Little change occurred in the indigent bathing program for the next several decades. Like the rest of the bathing industry at Hot Springs, the use of the free bathhouse declined dramatically after World War II. In 1951 Superintendent Donald Libbey proposed that the individual bathhouses carry out the indigent bathing program and that the free bathhouse be turned into an underwater therapy facility. The bathhouses would be reimbursed for the cost of the baths taken by the poor. Implementation of this plan occurred in 1957. The poor applied at park headquarters for the free bathing program, and upon approval a physician examined the applicant to determine if the thermal water would prove helpful. If baths were prescribed, the person was assigned to a bathhouse participating in the program for a prescribed number of baths. The bathhouses then kept account of the number of baths taken and turned these figures over to park authorities for reimbursement. This program continued through 1987, but is not significantly continued (Paige & Harrison '87: 134-35).

The competition between doctors at Hot Springs for patients became so fierce that some physicians hired agents to pass out circulars to lure prospective patients into their offices. The practice of soliciting for patients resulted in a number of abuses. At Hot Springs, this particular soliciting practice became known as "drumming." The problem of drumming became so pervasive that bathhouse owners formed the Hot Springs Bathhouse Association in 1882, in part to combat this evil. Not only did these drummers work for bathhouses, but they acted as agents for doctors, drugstores, boardinghouses, and hotels. The agent would board a train and begin a conversation with a patient going to Hot Springs. When he found out the patient's doctor, he would say that that particular doctor was a drunk, had left town, or was incompetent. Once the patient was persuaded not to go to his legitimate doctor, the drummer would direct the patient to his "doctor." The drummers got up to 50 percent of the doctor's fees. The same sales pitch, with slight variations and a more genteel manner, would be carried out for a particular bathhouse, hotel, boardinghouse, or drugstore. Bathhouse owners and managers avoided paying the drummers by taking the agent's fee out of the wages of black attendants and mercury rubbers. This assessment usually amounted to one-third of their salaries. The Hot Springs City Council passed an ordinance requiring drummers for boardinghouses, bathhouses, drugstores, and doctors to obtain licenses for $25 every three months. The Arkansas state legislature considered a bill,

which did not pass, that required the revocation of a doctor's license if he employed drummers. By 1897 the Hot Springs Reservation rules and regulations prohibited drummers from loitering around the bathhouses, forbade selling bathhouse tickets other than through the bathhouse offices, and prohibited charging drummer's fees to attendants. The penalty for violation of these rules included shutting off thermal water to that particular bathhouse. On April 18, 1899, the Hot Springs City Council passed an ordinance prohibiting drumming for bathhouses and doctors as a public nuisance. Violation of the law was punishable by a fine not to exceed $100 (Paige & Harrison '87: 157-159).

A major blow to drumming came in 1903 with the establishment of the Federal Registration Board, which consisted of five reputable physicians. A written examination was given to any physician wishing to prescribe hydrotherapy in Hot Springs. Those who passed the examination had their names placed on a list of approved physicians. Those failing the examination were banned from prescribing hydrotherapy in Hot Springs. The newly created board certified 94 physicians and rejected 25. Those who were rejected took the matter to the courts, which ruled that only the secretary of the interior could make rules and regulations governing Hot Springs Reservation. The United States Congress acted quickly to pass legislation conferring the right of the medical commissioners to evaluate physicians at Hot Springs, and the secretary of the interior appointed a board of commissioners on October 31, 1904. By January 1905 the board had released a list of registered physicians, and again the rejected physicians took the matter to the courts. This time the courts ruled in favor of the government. The board of commissioners proved an effective weapon against non-qualified physicians (Paige & Harrison '87: 159).

The sad plight of the sick being manipulated by unscrupulous physicians is a tragedy that has occurred in any great spa. The attempt by hired representatives to illegally direct patients to a particular doctor, hotel, or bathhouse, however, seems unique to the Hot Springs spa. Equally unique is the government control over the thermal waters and the attempt thereby to regulate the bathing industry. the dramatic decline in popularity of this resort in the post-World War II era resulted from many causes: the development of drugs in curing venereal disease and other maladies treated at Hot Springs; the changing vacation patterns of the American public and their use of leisure time; the failure of the bathhouses to adopt more economical and efficient bathing procedures; and the failure of the bathhouse owners to use new procedures and technology. The most significant of these new technologies were chlorinated and saline swimming pools and hot tubs that are highly effective at treating the exact same arthritic and rheumatic conditions as natural mineral and salt waters. These factors have led to the closure of all but one of the bathhouses on Bathhouse Row (Paige & Harrison '87: 205-6). Subsequently the Quapaw bathhouse reopened and there are now two operational bathhouses, usually booked solid.

After human and animal trials were funded by medical director Hallock, the medicinal value of the various salts and gases usually present in mineral waters were thoroughly explained. One of the most important groups of mineral waters are the alkaline waters, which are characterized by the presence, in predominating quantities, of one or more of the alkaline or alkaline earth carbonates or bicarbonates. These are the carbonates or bicarbonates of sodium, potassium, lithium, calcium, and magnesium. In case iron is present in large quantities as the bicarbonate we have a water belonging to the chalybeate class. Since these waters are alkaline they are excellent remedies in cases of sour stomach and in sick headaches which arise from acid dyspepsia. They act very markedly on the mucous membranes, increasing the flow of the gastric juice and other digestive fluids, and are consequently of use in many cases of indigestion. In conjunction with the sulphated salines they give excellent results when used in

the treatment of catarrhal conditions of the stomach and intestines. Such waters correct acidity of the urine, markedly increase the flow of urine and help to dissolve uric acid deposits. They are therefore of value in cases of rheumatism and gout. Sodium chloride occurs in almost all mineral springs to some slight extent, but in the muriated saline waters it occurs in large quantities as a predominating constituent. Waters containing large quantities of this substance are chiefly used in giving baths, which increase the action of the skin, and by absorption through the pores serve as a genuine tonic. Taken internally the flow of the digestive fluids is promoted and the appetite increased. Putrefactive changes in the intestines are also prevented. In large doses sodium chloride increases the flow of urine and the amount of urea present in the same. Sodium and magnesium sulphates, or Glauber and Epsom salts, respectively, in small doses act as a laxative, in large doses as a cathartic. They are both valuable in increasing the flow of the intestinal fluids and in increasing the flow of urine, accompanied by an increased elimination of urea. Waters containing these salts are of great service in eliminating syphilitic, scrofulous, and malarial poisons from the system, and in eliminating mercury and other metallic poisons. Persons suffering from obesity, derangement of the liver, and Bright's disease are perhaps the most benefited by this class, of waters. It must be borne in mind that such waters should be used with great care by the feeble and anaemic (Haywood '12).

The obsession with syphilis treatment seems to have eclipsed the effectiveness of sodium and magnesium sulphates, Glauber or Epsom salts, at treating arthritis and rheumatism. People use Epsom salt baths as a home treatment for: Arthritis pain and swelling. Bruises and sprains. Fibromyalgia, a condition that makes your muscles, ligaments, and tendons hurt, and causes tender points throughout your body. Ingrown toenails. Insomnia. Psoriasis, a disease that causes red, itchy, scaly skin. Sore muscles after working out. Soreness from diarrhea during chemotherapy. Sunburn pain and redness. Tired, swollen feet. Methicillin resistant *S. aureus* (MRSA) is visible as bumps / lesions on the epidermis, usually buttocks, but *S. aureus* can grow on any internal tissue and is large enough to cause 50% fatal heart attacks when admitted to a hospital, but usually parasitizes the spine causing luxation of the vertebrae with increased stroke risk if manipulation causes metastases to the brain. Clindamycin (Cleocin) 350 mg pills for the treatment of *Staphylococcus aureus* in pregnant women and children under the age of 8 who cannot take doxycycline. Although usually hospital acquired *S. aureus* epidemics have been quite severe in public benches and chairs during period of prolonged drought and also at swimming pools that don't use chlorine or salt, NaCl releases chlorine when it breaks down. *Streptococcus pyogenes* is a mild lung infection that likes to infect the throat, heart, and hip. Co-occuring *S. aureus* and *S. pyogenes* infections cause a painful toxic shock syndrome that is the probable cause of most fibromyalgias in the torso (Klippel et al ’01: 529, 531, 533)(Sanders ' 17: 211).

The Mayo Clinic reports that a staph infection causes white, pimple-like sores to erupt on the skin, and the area feels hot and painful, that can spread and cover large areas, infect the spine or organs. The drug-resistant bacteria can cause a range of difficult-to-treat infections, such as sepsis, pneumonia, skin infections and blood infections. *Staphylococcus aureus* bacterium live naturally on skin or in the nose of one in four people. However, if the bugs get inside the body they can cause serious infection, blood poisoning and even death. *Staph* is notoriously hospital and community acquired. *S. aureus* heart attacks are 50% fatal on hospital admission (Elvin-Lewis ’77: 194). *S. aureus* can also trigger food poisoning, commonly through contaminated meat products such as ham, as well as sandwiches, salads and dairy products. Methicillin resistant *S. aureus* (MRSA), is attributed to having developed resistance to the antibiotic methicillin, but there is no such antibiotic, and must be understood to mean that *Staphylococcus aureus* is not cured with either metronidazole for treating antibiotic resistant *Clostridium difficile* or *Helicobacter pylori* nor penicillin IV futilely prescribed for months of

outpatient treatment for hospital acquired MRSA. Doxycycline and clindamycin are the most effective antibiotics. *S. aureus* regulates its salt intake. Disrupting this mechanism, or oversaturating it means the bacteria either absorb too much salt from their environment, or lose too much water – causing them to dehydrate and die (Gründling '16). The best treatment for MRSA heart attack involves sterilization with an Epsom salt bath, saline or chlorinated swim to sterilize the infection, followed by Hawthorn, the supreme herb for the heart, with a meal to eliminate the lesion, and be cured. Hawthorne (*Crataegus laevigata*) is known as the "supreme herb for the heart", it is outstanding both to prevent heart problems and to treat high or low blood pressure, heart disease, edema, angina and heart arrhythmia (Gladstar '12). MRSA pre-diabetic pancreatic infection by *Staph* should also be sterilized with Epsom salt bath, saline or chlorine swim and treated with Onion (Allium cepa) and garlic (Allium sativum), cinammon, and Ginkgo biloba, that have significant blood sugar lowering action (Sanders '19: 331-32).

The first step for treating MRSA is saline solution, Epsom salt bath, salt water or chlorine pool or ocean. Mix 2 cups of Epsom salts per gallon of warm distilled water in a clean glass container. For smaller wounds, make a smaller recipe by mixing ¼ cup Epsom salts to 1 pint of warm distilled water. The water should be warmed gently to about 100 degrees (body temperature). Pure Epsom salts are an alkaline compound also known as Magnesium Sulphate. The mildly acidic properties of Epsom salts can very quickly disrupt the total alkalinity and pH balance of the water in your hot tub. Unbalanced water can launch a cascade of other problems, including reduced sanitizer performance and corrosion of your hot tub equipment (metal parts, plastic pieces, seals, gaskets, etc.). When using a regular bathtub, the standard recommendation is to add 2 cups of Epsom salts to feel the full therapeutic effects. The average bathtub holds about 80 gallons of water. On the other hand, the average hot tub holds about 400-500 gallons. To reach the same concentration level in your hot tub would require 10-12 cups of pure Epsom salts. To avoid scale buildup on spa surfaces and equipment, many spa manufacturers recommend draining and refilling a hot tub when the level of total dissolved solids (TDS) reaches 1500 ppm or higher. Hot tub aromatherapy products offer many of the same benefits as Epsom salts. In fact, most aromatherapy crystals use Magnesium Sulphate (Epsom salt) as the primary ingredient. The key difference is that spa aromatherapy crystals have been specially formulated for use in spas and hot tubs. Most spa crystals are also formulated with vitamins, minerals, moisturizing nutrients and natural herbs and botanicals. And of course, there's the unique aromatherapy experience that can elicit any desired benefit or mental state. De-stress, detoxify, rejuvenate, reduce pain and inflammation, breathe easier, boost energy levels or promote a better night's sleep - anything is possible with aromatherapy. Human trials are wanted to convince the FDA and their Coronavirus Product Advisory Committee to approve eucalyptus, lavender or peppermint to cure coronavirus (Sapeika '63)(Juergens et al '03)(Asif et al '20)(Patne et al '20)(Sharma '20a)(Sharma '20b).

The primary reason for the decline in popularity of bathhouses, ignored by Hot Springs authors, is best believed to be the rise in popularity of the equally or more reliably medicinal chlorinated and saline swimming pools and hot tubs. Swimming pools, at least man-made watering holes for bathing and swimming, go back at least as far as 2600 B.C.E. The first heated swimming pool was built by Gaius Maecenas of Rome in the first century BC. Soon, Roman bathhouses were found in every major city and most settlements. Many featured elaborate designs with multiple pools maintained at different temperatures. Some even used silver plates believed to be the first attempt at chemical sanitization. In modern times, swimming pools did not become popular until the middle of the 19th century. By 1837, six indoor pools with diving boards were built in London, England. After the modern Olympic Games began in 1896 and swimming races were among the original events, the popularity of swimming pools

began to spread. The Cabot Street Bath in Boston was the first swimming pool in the U.S. It opened in 1868 and served a neighborhood where most of the homes did not have baths (Wiltse '09).

In the 20th century, a number of leaps in science and technology took swimming pools to a new level. Among the developments, chlorination and filtration systems that delivered clean water into the pool. According the *Journal of American Hygiene*, the first attempt to sterilize a pool in the U.S. using chlorine was at Brown University in 1910. Prior to these developments, the only way to clean a pool and maintain safe bathing conditions was to remove and replace all the water. The long-term implications of rapid-sand filtration and chlorination cannot be overstated, both for public water treatment and the development of contemporary swimming pools. By the end of the roaring '20s, public pools and baths were common in the vast majority of U.S. Cities. From the turn of the century to the beginning of World War II, residential swimming pools remained largely the province of the wealthy. Today's swimming pool industry truly started right after the Allied victory in the Second World War. In the U.S. the pool business expanded with the invention of gunite, a material that allowed faster installation, more flexible designs, and lower costs than previous methods. The post-war rise of the middle-case, coupled with the relative affordability of pools accelerated pool proliferation even further (Herman '13). There were even less expensive options than gunite. In 1947, above ground pool kits hit the market, creating an entirely new pool experience. It wasn't long before single unit pools would be sold and installed in a single day (Bellis '20). Today, in the USA there are over 10.4 million residential and 309,000 public swimming pools though New Zealand holds the record for most pools per capita (pop.4,116,900), with 65,000 home swimming pools and 125,000 spa pools. The Holy Medical Spring, in Tibet, China, is believed to be the highest swimming pool in the world. The resort is located 4200 meters above sea level and has two indoor swimming pools and one outdoor swimming pool, all filled with water from hot springs. Tourists love to take a bath, or swim, in the hot springs at the foot of the grand snow mountains.

Twentieth- century advances in aquatics - combining disinfection, recirculation, and filtration systems - led to an explosion in recreational use of residential and public disinfected water. However, infectious agents, including bacteria, viruses, protozoa, and molds, may threaten the health of swimming pool bathers. Viruses are a major cause of recreationally-associated waterborne diseases linked to pools, lakes, ponds, thermal pools/spas, rivers, and hot springs. Although there is little evidence that swimming pools present a significant health hazard, disease can be spread by contaminated swimming pool water or by contact with contaminated objects or persons in the pool or pool area. Some of the illnesses known to be spread by contaminated water are: colds and respiratory infections, typhoid fever, amoebic and bacilary dysentery, cholera, diarrhea, hookworm, tapeworm, infectious hepatitis, intestinal disorders, and miscellaneous eye, ear, nose, throat, and skin infections. Therefore, it is highly important to eliminate organisms which cause these diseases from swimming pool water (Army '86: 1-5). *Cryptosporidium* causes a diarrheal disease spread from one person to another or, by ingestion of fecal contaminated water. This pathogen is tolerant of chlorine and other halogen disinfectants and can survive up to ten days in chlorinated water. *Cryptosporidium* has emerged as the leading cause of pool associated outbreaks in the United States (MAHC '18: 1.22).

Swimming at national parks is often impaired due to water contamination, real, accidental, intentional or imaginary, because water treatment is not appropriate for natural swimming holes. Before 1930, the city of Hot Springs owned the area and maintained a large natural "swimming pool" at Gulpha Gorge. When the National Park Service bought the property in the 1930's, claiming bathers had contaminated the water, they took the dam out and let the water run. It is true, micro-organisms pollute swimming

pools. Every swimmer adds 1.000.000 to 1.000.000.000 microorganisms to the water. The water itself contains microorganisms, as well. After oxidation a disinfectant must be added to the water to kill pathogenic microorganisms. Pool chlorine is also known as hypochlorous acid. Bromine doesn't smell as strongly and it it tends to be less irritating to eyes. Saltwater chlorinators turn salt into chlorine using a specialized generator. UV pool sanitation systems are an almost chemical-free way to keep your swimming pool clean. The pool will require additional chemicals to keep it clean before and after it is sanitized by the UV light. Pool ozone is considered a supplemental disinfectant. A swimming pool ionizer releases heavy metal ions, like copper and silver, into the pool water to kill bacteria and algae. It's a slow-acting process, and it's not sufficient enough to work as a stand-alone sanitizer. A natural pool system with plants, rocks, and sometimes wildlife in the pool, may work. This type of system relies on the pool biofilter, a zone of rocks and aquatic plants that regenerate the water and clear it of impurities. This is the same purification system that is often found in nature. Salt is a popular source of chlorine because it's affordable and easy to get. It also doesn't have the same risks as some other sources of chlorine or pool cleaners. The best pool salts are 99% sodium chloride as possible. Saltwater chlorinators are the preferred method of disinfection. Although the National Park Service is sought to secure the swimming pool grant from the Interior Department, to prevent outbreaks of realist and imaginary disease being used to justify Draconian pool closures, it may be necessary to contract private operation of the swimming pool by swimming pool professionals,

Before Ral Springs was closed by the first superintendent, as many as 20 people would crowd into the free free spring (Paige & Harrison '87: 47). Although there should be some free hot tubs a large swimming pool seems necessary to provide all visitors with a free bath. Approximately 1.5 million people visited the National Park at Hot Springs, a city with a population of only 36,969, in 2018. There is no entrance fee to the park. There is a free parking garage at 128 Exchange St. The Gulpha Gorge campground is first come first serve, with a 14 day limit. There are 26 miles of trails. The cost of constructing Olympic-size swimming pools is between $300,000 and $500,000. Maintenance costs $250,000 a year in chemicals and utilities alone (Brown '08). With insurance, life guard and other labor it would probably cost $500,000 to construct and $500,000 a year to maintain. Olympic-size pools conform to very strict measurements. They are exactly 50 meters in length, 25 meters wide, contain 10 lanes, two meters deep and contain 2.5 million liters, 660,430 gallons of water. Each lane measures 2.5 meters in width. In the United States a 25 yard pool is used for most competitions. The Hot Springs YMCA has a 25 x 25 meter pool that is about four feet deep and has ten lanes. Although the thought of hosting the Olympics at Hot Springs is grandiose, demand is to provide 4,000 to as many as 10,000 a people, including small children, a free bath, on any given day, and more people could safely bathe in shallow pool, with some lanes only during lap swim times. Diving boards 0-6 ft in height require a depth of 8.5 ft, 6-9 ft in height a depth of 10 ft and higher than 9 feet a depth of 11.5 ft (Army '86: 2-6). Special care would need to be taken to regulate the heat of the water using the natural 147 F Hot Springs water, so that is not too hot or too cold to swim outdoors in the winter. Youth swimming classes, aquatic exercise programs for older patrons and winter bathers may prefer water temperatures between 28.3 and 30 C (83 to 86 F), while swim teams prefer water temperatures ranging from 25.5 to 27.7 C (78 to 82 F) (Vore '12).

7. Army and Navy General Hospital

The historic Army and Navy General Hospital district located in Hot Springs, Garland County, Arkansas, 105, 200, 417, 421 and 425 Reserve Street, has been listed in the National Register of

Historic Places since 9 February 2007. It contains approximately 10 acres. The district, is located in "Unplatted Hot Springs," the Southwest V of Section 33, Township 2 South, and Range 19 West, the tax parcel number assigned to this prom is parcel 500503000003 and the property ID number is 50967. The district is basically a peninsula (with the exception of 200 Resem Street), surrounded by Hot Springs National Park on three sides; portion of the park lie to the north, east and west of the district. Reserve Street ms parallel to the southern boundary; Vickery Road runs parallel to the western boundary; and portion of Gandy Road, a fire lane, and Grover Avenue run parallel to the northern boundary: while sections of Fisher Road and Taylor Road run parallel to the eastern boundary. The boundary contains a cohesive group of 31 buildings that possess integrity and support and convey he significance of the Army and Navy General Hospital, which serves as the focal paint of the entire district.

On the 10 acres there is a mixture of styles and age of buildings. The hospital is a six storv yellow black structure and the Army Nurses Quarters which is a three story structure of similar construction. Both buildings were built in 1933. They, and the rehabilitated and reforested Ranger Station and Forestry Laboratory are the only buildings believed to be rehabilitated, lead and asbestos abated enough to warrant future protected by occupation. There are also French Colonial influenced brick apartments for staff built in the 1920s and several duplex units for hospital staff, that want to be demolished with the late 19th and Early 20th century commercial style buildings and wooden barracks. The three most recent buildings were built in 1974 and are of an industrial commercial style of reinforced concrete are also condemnable. All buildings are located in a park-like setting with connecting walkways, concrete streets and a multitude of concrete and stone retaining walls. The application is in error to state that most of the buildings in good shape and all buildings other than those that have been abated for lead and asbestos and structurally intact are salvageable. In use for one purpose or another. Many of the buildings may be currently used for storage and will require notice of eviction with plenty of time. In addition, Building 2 (G.40363) was a bowIing alIey, and later the Non-Commisioned Officers building, and the lanes and manual pinsetters are still intact and operable. The Department of Housing and Urban Development issued regulations requiring Housing Authority officials to inform tenants of the reasons for an eviction and to give a tenant the opportunity to reply pursuant to *Thorpe v. Housing Authority*, 393 U.S. 268, 281—282 (1969).

Hot Springs National Park is home to the former Army-Navy Hospital, the first general hospital in the nation that provided treatment to both Army and Navy patients. It is located behind the south end of Bathhouse Row along the base of Hot Springs Mountain. After the Civil War, exhausted and wounded soldiers made pilgrimage to Hot Springs for the healing properties that they believed the waters to possess. Since its conception, one of the major focuses of the Army and Navy General Hospital has hen the use of thermal waters to treat rheumatic diseases. The Army and Navy General Hospital, the Army's oldest general hospital, was chosen because of its past history and excellent facilities (Smith 1963). The hospital utilized the therapeutic properties of the mineral hot springs in that area. Since the origination of the idea to construct a hospital, the hot springs played and integral part, in site selection for the hospital, as well as in the way in which many of the injured or sick soldiers were treated. The 1887 hospital continued to serve the military until it was replaced by a new, modem hospital in 1933 (Vogel 1968).

In 1852, Senator and General John A. Logan, a veteran himself, visited Hot Springs as prescribed by his physician Dr. A.S. Garnett. Garnett was a former Navy surgeon who based his practice in Hot Springs. Garnet had long been advocating for the establishment of an Army Navy hospital in his town,

which would prove beneficial to his business. He successfully conveyed this idea to General Logan. During a dinner party in the Palace Bathhouse In 1882, Sen. John Logan declared Hot Springs to be "an ideal location for an institution of this character" and promised to introduce legislation for an appropriation upon his return to Washington, D.C. When he returned to Washington D.C., Logan proposed the plans to Congress. At last, on June 30th, 1882, President Chester A. Arthur signed the bill, stating that "$100,000 be, and hereby is, appropriated for the erection of an Army and Navy Hospital at Hot Springs, Arkansas, which shall be erected by and under the direction of the Secretary of War" in the Army Appropriation Act of June 30, 1882 (22 Stat. 121). This created the first peacetime general military hospital. On 20 May 1886, President Grover Cleveland signed the executive order establishing the Army and Navy General Hospital. The Army-Navy Hospital opened to patients in January 1887 and was led by the Secretary of War, until control was handed off to the U.S. Army in 1957. After selling the property to the state of Arkansas in 1960 and in 1961 was reopened as the Hot Springs Rehabilitation Center. From 2009 the facility known as the Arkansas Career Training Institute, and later the Arkansas Career Development Center until it was closed in 2020.

The original Army and Navy General Hospital was designed by John L. Smithmeyer, Superintendent of Southern Architecture. The military selected the fum of Smithmeyer and Peltz, architects in Washington, D.C., to draft the plans. This building, built of brick and wood, had a Swiss chalet style and could hold a capacity of 100 patients. Construction began in February of 1884 under the supervision of Captain J. W. Jacobs. The original navy hospital was built pavilion-style, and because of this, the original wooden structure was very spread out, to prevent the transmission of disease through vapors, resulting in inconveniently long walking distances between doctors and patients. Around the turn of the century, the Navy began remodeling its hospitals built on pavilion-plans. The new "Type Naval Hospital Plan" replaced the old style. This new scheme generally consisted of a multi-story main hospital, a contagious disease hospital, and living quarters arranged in a T-shape. The modern design eliminated the cumbersome distance between patients and doctors. Following World War I, this plan became a necessity, as pavilion hospitals were unable to accommodate large amounts of patients in time of crisis. In 1929, the average number of patients at a single time in Hot Springs were 239, but the wooden hospital could only hold 80-100. In 1929, the commanding officer of the Veterans' Bureau recommended that the War Department and the Veterans' Bureau build a new hospital, each paying a share of the costs. In 1930, Congress appropriated $1,500,000 for the construction of a new hospital built win the fashion of the new "Type Naval Hospital Plan". Congress. in the Act of June 18, 1930, appropriated $450,000 for the reconstruction of the hospital. To this, the Veterans -administration added something over a million dollars from the hospital finds appropriated to it by the act of December 29, 1929. In 1930, Congress appropriated % 1,500,000 for the construction of a new hospital. The Act of June 18, 1930, provided that the exterior design of the new hospital shdd be approved by the National Park Service. The hospital grounds were increased in 1931 by assignment of 9.15 acres of park land adjoining it on the east. This brought the total area of the hospital reservation to 24.24 acres.

The military appointed Captain Edward M. George as the overseer of construction in December of 1931. Unfortunately, the architect's identity remains unknown. On December 13th, 1931, Captain George described the plans for the new hospital to the Arkansas Gazette. "The structure, will be of the reinforced concrete type, veneered with light colored brick, trimmed with white stone, and ornamented with ornamental bronze, It will have a central tower 12 stories high, standing 189 feet above the roadway at the main entrance. Surround fag the tower will be the head house, 40 feet wide and 120 feet long and eight stories high. Directly in the rear of the tower will be the center wing, six stories

high, 40 feet wide and 130 feet long. There also will be two wings, one parallel with Reserve Ave. and the other parallel with Central avenue, each 40 feet wide and 240 feet long and each six stories high, 40 feet wide and 130 feet long. The entire structure will contain approximately 200,000 feet of floor space. The two side wings will be quipped with heliotherapy decks on the roof and contain about 16,000 square feet of floor space. The building will house administrative activities, the technical service required for the operation of a general hospital, and all other necessary features. The hospital will have a capacity of 412 beds. Screened porches on the street side of the side wings will be available. The openings from wards and rooms to porches will be French doors. Four elevators mill be installed. There will be a hydrotherapy pool on the first floor, l0 feet wide and 20 feet long. Provision will be made throughout for the piping of both hot and cold domestic water and hot and cold mineral water. Marble, tile and terrazzo will be used freely. All the room perbinin2 to any one service or department will be master keyed. All rooms will be master-keyed by floors, and every lock in the building will be master-keyed to one key.

The War Department awarded the National Construction Company of Washington, D.C. the bid for the construction of the hospital. The company appointed J.D. Copeman, Superintendent of Construction. The groundbreaking occurred 31 March 1932. During construction of the Army and Navy General Hospital, the "east annex" or nurses' quarters, also known as Ross Hall, was also under construction for $160,000.. The building was designed in the Spanish Revival style to compliment the Army and Navy General Hospital. Henry B. Ryan of Chicago, served as general contractor. Construction on the nurses' quarters was completed in December of 1933. The original building was replaced with a brick-mortar and steel facility with 412 beds. It cost a mere $1.5 million, which would equal nearly $15 million in today's market. Captain George did exactly what he planned to, and spared no expense in constructing one of the most impressive architectural masterpieces in the south. With 210,000 square feet it's maximum capacity was 500 patients, whereas the former hospital could host only 100. The new hospital contained a refrigerated morgue, an x-ray treatment wing, the most modern equipment money could buy, and the finest operating rooms in the south. The hospital was known throughout the nation as one of the finest facilities in existence. The hospital specialized in the treatment of arthritic and polio illnesses and was designated by the Army as its primary facility for rheumatism treatment. According to a history of the building by Carl Enna, the layout of the hospital was as follows: The morgue was housed in the rock and concrete basement, which also made it a perfect bomb shelter, the first in Garland County. The 1st floor was the medical ward for men and children. The 3rd floor was the general mess hall, whereas, the 4th floor served as the officer's mess hall. The operating rooms, considered at the time to be the finest in the South, were located on the 6th floor. Also located on the 6th floor was a library and an outdoor theater where first-run movies were shown two to three times per week. There was also a sundeck on the 6th floor. Patients received body massages and physical therapy treatments in the halls of the north wing on the 6th floor.The 7th floor housed an observation gallery overlooking the 6th floor operating rooms. The 7th floor was home to X-Ray and the radium treatment area. Obstetrics was located on the 8th floor along with the VIP Penthouse for retired officers. The 9th floor was home to KANH, the Army/Navy Radio Station that broadcast four different types of programs that were distributed throughout the hospital.The radio station used pillow speakers, a unique technology for the time (Enna '04: 10).

Despite all efforts at revitalizing the hospital into a modern masterpiece, the medical center simply could not keep up with the influx of patients from World War II. Normally, the hospital admitted around 400 patients per month. However, in June of 1945 alone, over 1,800 soldiers were admitted. As World War II continued, more and more soldiers developed rheumatic disorders. The Army and Navy

Hospital was overwhelmed with the number of servicemen sent to the hospital for treatment. By 1945, it became one of the largest centers in the world for the treatment of these types of crippling diseases. More than 10,000 cases were treated in just the two-year period 1944 and 1945. On a weekly basis military planes carrying injured soldiers would fly into the Hot Springs airport carrying soldiers that would be admitted to the military hospital. The Army and Navy hospital rented out several hotels in the area to accommodate the influx of patients, including the Arlington Hotel, the DeSoto hotel, the former Majestic Hotel, and the former Eastman Hotel. The overflow of hundreds of soldiers that the hospital could not accommodate were sent to the adjacent large 500 room Eastman Hotel (now the site of the Federal Building at Reserve and Central Avenue.) An elevated walkway connecting the hospital and the Eastman Hotel was constructed over Reserve Street. In June of 1945, the combined facilities of the hospital and the Eastman Hotel housed over 1,700 patients! The medical staff included 60 physicians, 90 nurses and 10 dentists. The Army and Navy Hospital also employed hundreds of local citizens in many capacities including chefs, boiler operators, and administrative staff. (Farrar '19).

The Army and Navy hospital specialized in other things than general care for soldiers. The hospital was a training facility throughout World War II, where men could receive technical training in various medical fields, including dentistry, surgery, and pharmacy. Each school had ten days to implement large-scale training, offering courses in six enlisted specialties: laboratory, X-ray, dental, pharmacy, medical and surgical technicians. Throughout WW II, the army continued to expand its technical training programs in special school, established solely for that purpose, and in existing hospitals. The army also established the first Medical Department Enlisted Technicians School for members of the Women's Army Corps at the Army & Navy General Hospital. The women there were responsible for developing the program guide that insured standardization throughout alI existing and future Women’s Army Corps technical schools. The program at the Army and Navy General Hospital was one of the smaller training program and was the first to close in 1944, followed by four others that fall. The hospital was the leader in the nation at treating poliomyelitis and arthritis. Patients from all over the world traveled to Hot Springs to be admitted into the care of the hospital. It was globally renowned for its state-of-the-art facilities and proximity to the healing waters. It was also one of the top five employers in all of Garland County (Parks 1974: 213, 221).

During WWII the hospital became one of national importance due to the medicinal properties of the therma1 waters used to treat various illnesses and injuries. It was the use of these thermal water that were an important to the 1887 hospital and made this 1933 hospital one of national significance. One floor of the hospital was equipped with "the most modem bath. vapor cabinets, underwater pool, whirlpool equipment, as well as Hubbard rubs, to administer the hydrotherapy treatment given at the institution, which featured the use of steaming waters from the natural hot springs. As did the old hospital before it, the new hospital utilized the therapeutic properties of the mineral hot springs in that area. The hydrotherapy section included the first therapeutic pool in the Army. It was equipped with weighted tables and chairs and an overhead carriage for conveying a chair or litter into the pool. Physical therapists used the pool to great advantage in giving underwater exercise to patients with arthritis. It was patterned after the one at Warm Springs, GA. In 1927, Roosevelt founded the Georgia Warm Springs Foundation, a hospital for people with polio. Here he hot springs were used to fill pools and rubs to treat polio-stricken patients. During WWII, the Amy and Navy General Hospital was the largest center for treating adults afflicted with infantile paralysis in the country. The hospital offered spa therapy for patients with arthritis and poliomyelitis. It was the only center designated for the treatment of poliomyelitis. Most of the poliomyelitis patients were in the subacute or conva1escent phase, having been transferred to Army and Navy General Hospital from points all over the world.

Reports from his hospital describe the manner as a modified Kenny method which included moist hot packs, baths, and underwater and re-educational exercise. Prevention of contractures and fatigue was emphasized (Vogel 1968: 55, 254-56). On 17 December 1943, the Army designated the Army and Navy General Hospital as the first Army Arthritis Center for the treatment of chronic arthritis. Doctors diagnosed sixty-five percent of the arthritic patients admitted to he hospital as having rheumatoid arthritis, fibrositis, or osteoarthritis. The primary goal of the hospital was not to cure (as there was no cure) but to provide relief of pain and maintenance of normal joint range motion, using physical therapy and hydrotherapy. Between 1941 and 1945 of 14,731 admissions, 8,303 (57%) were for arthritis (Enna '04: 11).

In the early 1950s efforts were made to close the hospital. The reason for the movement by the federal government to close down or downsize its military hospital operations throughout the country was the declining number of active-duty service men after WWII; the fact that the facility was not located on or near a Navy or Amy base; the enrollment of veterans in the Veterans' Administration hospital system; and the discovery and administration of the Salk Vaccine in 1956, which "almost eliminated the patient with acute paralytic poliomyelitis from Army hospitals. Despite its gleaming reputation, on October 20th, 1952, the military announced the closure of the Army & Navy General Hospital. Throughout the 1950s the hospital operated on a year-to-year basis. The final closure date was set for April 1st, 1960 (Enna '04: 11). The hospital had treated over 125,000 patients throughout its lifetime including General John (Black Jack) Pershing, Al Jolson, Jo DiMaggio, Eddie Duchin, Kay Kyser; Alan Ladd; and Helen Keller. It was one of the first technical schools in the world to teach both men and women in various medical disciplines. This grand building was once known by all as the best institution in the world for treating polio and arthritis.

On the last day of operations, April Fools Day of 1960, the army sold the hospital to the State of Arkansas for $1. Governor Orval Faubus accepted the deed to the complex on behalf of the state. Faubus then gave the deed to A. W. Ford, Arkansas Commissioner of Education and Don Russell, Director of Arkansas Rehabilitation Services. On 3 January 1961, after a year of renovations, the former military haspita1 opened under the new name, the Hot Springs Rehabilitation Center. By August 1961, 160 students were enrolled at the Center. Twenty-six courses were offered and 135 of the group were in training. Among the first vocational training courses were upholstery, woodworking, general mechanics, automobile painting and body and fender repair, special education, sewing and tailoring, custodial. appliance repair, food service, radio-TV repair and radio-TV communication. HSRC became a state-run, full-scale rehabilitation facility run by Arkansas Rehabilitation Services, one of nine of its kind in the nation and the only one west of the Mississippi River. HSRC served people with life-long disabilities as well as those who have acquired disabilities. In 1971, HSRC was one of three institutions in the country selected to participate in a research project sponsored by the National Aeronautics and Space Administration (NASA). Dr. George Hassard was the project director of the research experiment to develop a "sight switch" for use by individuals having limited or no use of arms and legs. In 1972, the HSRC admitted its first students from outside of the United States, four deaf students from the Virgin Islands enrolled. Approximately 25,000 Arkansans with disabilities were treated there. In 2009, the building changed hands once again. The HSRC became the Arkansas Career Training Institute. On 9 February 2007, HSRC was added to the National Register of Historic Places as part of the Army and Navy General Hospital District (Lutz & Oosterhous '05).

While other federal government hospitals were larger and treated more patients, no hospital boasted a longer career than HSRC. Although it was licensed for roughly three times the twenty-four active beds

it had in the medical wing, the demand was more for vocational training rather than medical services. This shift in demand resulted in the State of Arkansas announcing in November 2011 a plan to close the medical wing of the center. In 2009, HSRC became the Arkansas Career Training Institute (ACTI), focusing on vocational training. Ten years later, as a result of Governor Asa Hutchinson's reorganization of state government (Act 910 of 2019), the ACTI was slated for closure at the end of 2019. Arkansas Rehabilitation Services announced in May 2019 that it was discontinuing the program on the campus known as the Arkansas Career Training Institute, and later the Arkansas Career Development Center. The state of Arkansas vacated the building at the end of June 2020, beginning the process of the title to the 20-acre property reverting to the Department of the Army. In 2020, the building was included in Preserve Arkansas's annual list of most endangered places.

Clay Farrar, who chairs the Committee on the Future of the Army and Navy Hospital on behalf of the Greater Hot Springs Chamber of Commerce, said the committee's "No. 1 concern" since its creation in June 2019 has been that there would be a "homeless problem" at the vacant building that sits at 105 Reserve St. in downtown Hot Springs. Chip McAfee, Arkansas Rehabilitation Services director of communications, said that as far as he knows, there have only been "a few instances of people being on the property who are not supposed to be there." "There has been one door that was breached to the main building, which was secured once discovered," McAfee said. "The National Park Service is providing surveillance and patrols around the property as well." All incidents involving the building are being reported to the National Park Service. Park service Law Enforcement Operation Supervisor Jeff Johnson confirmed there has been indication of breaking and entering, theft of toilet paper and cleaning supplies, and that trespassers have been found on the property. "I believe that the maintenance staff that worked there ... have located some open doors and unlocked windows that indicated people have been squatting," Johnson said. "We now conduct security patrols ... and have some surveillance cameras to keep any vandalism at a low and get anybody who shouldn't be in there," he said. "We conduct daily patrols through the area...day and night, and if anyone is contacted trespassing on the property, they can certainly be cited and arrested and charged federally for breaking and entering, and whatever the case may be. We certainly urge the general public to not enter." (Kendall '21).

The Army deeded the property to the state in 1960 on the condition that it be used for health or education. Arkansas Rehabilitation Services used the campus for the state's residential job training program for young adults with disabilities. The deed conveying the property from the Army to the state in 1960, and the enabling 1959 act of Congress, stipulated that the campus would immediately revert to the Army if the secretary of the Army determined it was no longer being used for health or education. The U.S. Department of the Interior has declined to take custody of the Army and Navy General Hospital, according to Preserve Arkansas, the nonprofit that has taken the lead on securing a caretaker for the property. Clay Farrar chair of the Committee on the Future of the Army and Navy Hospital on behalf of the Greater Hot Springs Chamber of Commerce said "It was supposed to go back to the federal government on July 1, and the Department of Army has declined to take the deed, and the Department of Army has taken the position they do not want the property". (Kendall '21). On July 1, 2020, the electric power and steam heat was turned off to the large hospital building and the complex went dark (Farrar '19). The day after Clay Farrar died, on 28 February 2021, the Committee on the Future of the Army and Navy Hospital reported that the pipes burst due to freezing and the bottom three floors were damaged by flooding.

8. Downside

Arkansas has a slightly higher suicide rate 18 per 100,000 than the rest of the nation 14 per 100,000 in 2018. In 2018 there were 10 suicides in Hot Springs AR. Suicides have steadily increased since 1999 ion the United States. Arkansas tends to fluctuate as the rate increase most recently from a high of 21 per 100,000 in 2012 down to 18 per 100,000 in 2018. In 2015 (the most recent year of available death data), suicide was responsible for 44,193 deaths in the U.S., which is approximately one suicide every 12 minutes. In 2015, suicide ranked as the 10th leading cause of death and has been among the top 12 leading causes of death since 1975 in the U.S.7 Overall suicide rates increased 28% from 2000 to 2015. Suicide is a problem throughout the life span; it is the third leading cause of death for youth 10–14 years of age, the second leading cause of death among people 15–24 and 25–34 years of age; the fourth leading cause among people 35 to 44 years of age, the fifth leading cause among people ages 45–54 and eighth leading cause among people 55–64 years of age. Suicide rates vary by race/ethnicity, age, and other population characteristics, with the highest rates across the life span occurring among non-Hispanic American Indian/Alaska Native (AI/AN) and non-Hispanic White population groups. In 2015, the rates for these groups were 19.9 and 16.9 per 100,000 population, respectively. Other population groups disproportionately impacted by suicide include middle-aged adults (whose rates increased 35% from 2000 to 2015, with steep increases seen among both males (29%) and females (53%) aged 35–64 years; Veterans and other military personnel (whose suicide rate nearly doubled from 2003 to 2008, surpassing the rate of suicide among civilians for the first time in decades) (Lineberry '12); workers in certain occupational groups (McIntosh '16), and sexual minority youth, who experience increased suicidal ideation and behavior compared to their non-sexual minority peers (Russell et al '01).

Risk factors include: Individual level: history of depression and other mental illnesses, hopelessness, substance abuse, certain health conditions, previous suicide attempt, violence victimization and perpetration, and genetic and biological determinants • Relationship level: high conflict or violent relationships, sense of isolation and lack of social support, family/ loved one's history of suicide, financial and work stress • Community level: inadequate community connectedness, barriers to health care (e.g., lack of access to providers and medications) • Societal level: availability of lethal means of suicide, unsafe media portrayals of suicide, stigma associated with help-seeking and mental illness. Studies from the U.S. examining historical trends indicate that suicide rates increase during economic recessions marked by high unemployment rates, job losses, and economic instability and decrease during economic expansions and periods marked by low unemployment rates, particularly for working-age individuals 25 to 64 years old (Luo '11). Means of suicide such as firearms, hanging/ suffocation, or jumping from heights provide little opportunity for rescue and, as such, have high case fatality rates (e.g., about 85% of people who use a firearm in a suicide attempt die from their injury) Elnour et al '08). Research also indicates that the interval between deciding to act and attempting suicide can be as short as 5 or 10 minutes (Deisenhammer et al '09).

Suicide hotspots, or places where suicides may take place relatively easily, include tall structures (e.g., bridges, cliffs, balconies, and rooftops), railway tracks, and isolated locations such as parks. Efforts to prevent suicide at these locations include erecting barriers or limiting access to prevent jumping, and installing signs and telephones to encourage individuals who are considering suicide, to seek help (Cox et al '13). After erecting a barrier on the Jacques-Cartier bridge in Canada, the suicide rate from jumping from the bridge decreased from about 10 suicide deaths per year to about 3 deaths per year (Perron '13). Practices that include routine suicide prevention training for all staff; standardized intake screening and risk assessment; provision of shared information between staff members (especially in transitioning or transferring of inmates); varying levels of observation; safe physical environment;

emergency response protocols; notification of suicidal behavior/suicide through the chain of command; and critical incident stress debriefing and death review can potentially reduce suicide.102 When these policies and practices were implemented across 11 state prisons in Louisiana, suicide rates dropped 46%, from a rate of 23.1 per 100,000 before the intervention to 12.4 per 100,000 the following year. (Hayes '95). Similar programs have seen declines in suicide both in the United States and in other countries (Barker et al '14).

Henry Hallock was born on October 14, 1867, in Jersey City, New Jersey. He graduated from the College of Physicians and Surgeons in New York City in 1890. He married Jannette Halford; they had a son named Halford and a daughter named Elizabeth. After practicing medicine for two years as a civilian, Hallock joined the U.S. Army as a surgeon on November 4, 1892. As a result of health problems suffered while in the service, he received a medical discharge on May 20, 1908, and returned to private medical practice. This discharge was made final by the fact that he failed new regulations put in place by President Theodore Roosevelt requiring all military officers pass a horsemanship test. A federal inspection of Hot Springs in 1910 revealed serious problems, including corruption, mismanagement, and poor medical care, at the reservation. In response, the Department of the Interior created the new position of medical director for the Hot Springs Reservation and gave the job to Hallock, who unapologetically fired nearly one out of every three bathhouse attendants for reasons such as alcoholism, poor hygiene, and theft. Hallock also fought for licensing for all bathhouse attendants, improved cleanliness of all bathhouses, the renovation of outdated medical equipment, and an end to corrupt business practices on the reservation. Hallock personally taught classes for bathhouse attendants and denied licenses to applicants who failed his stringent examinations. Hallock sent reports of his reforms to Washington DC and published them in the Journal of the American Medical Association.

Hallock's reforms improved the quality of medical treatment at Hot Springs and earned him praise from Washington, but he also angered some powerful people in Hot Springs. Numerous critics, who included Hot Springs Reservation superintendent Harry Myers, disagreed with Hallock's expensive reforms. They also took issue with his high salary of $4,400 per year (Superintendent Myers earned only $3,000 per year) and the expensive federal construction projects at the medical director's residence. By May 1913, at least one local journalist called for Hallock's dismissal and the elimination of the medical director position. In addition to dealing with increasing political opposition, Hallock continued to suffer from the health problems that led to his medical discharge, and he endured a series of painful surgeries. On May 19, 1913, reservation staff realized that Hallock was not in his office. A search of his desk revealed a note stating: "have been fighting melancholia for weeks, and can no longer resist impulse to destroy my family and myself." Reservation staff discovered his body later that afternoon. Hallock had dressed in his military uniform, walked into the woods near Whittington Park, and ended his life with a gunshot to the head. He is buried at Arlington National Cemetery. Hallock's reforms live on in the twenty-first century and form the basis for modern regulations at Hot Springs National Park. Mercury is a neurotoxin. Adults, children, and developing fetuses are at risk from ingestion exposure to mercury. Once in the human body, mercury interferes with the brain and nervous system. Prenatal or early infant exposure to mercury can cause a host of health issues in humans including mental retardation, cerebral palsy, deafness, blindness, developmental disorders which can delay motor and communication skills, and learning disabilities. Scientists are now studying links between mercury exposure and autism. Adult exposure can cause memory and vision loss, tremors, and numbness in extremities. Scientists are also studying links between mercury and heart disease.

Syphilis is a sexually transmitted disease caused by the bacterium *Treponema pallidum* and has four stages. Three of the four has manifestations on the skin of the sufferer. In the primary stage, painless ulcers or chancres appear on the genitals and if allowed to progress into the secondary stage, blotchy red rashes appear, usually on the palms of hands and soles of the feet. Occasionally, hair loss also develops at this stage. This is then followed by a latent stage during which sufferers have neither sign nor symptom of the disease. This stage can last for years. During the tertiary stage of syphilis, the skin, bones, internal organs, nervous system and cardiovascular system begin to be irreversibly damaged. Patients are often ostracized from society and suffer from severe disfigurement. Mercury was the remedy of choice for syphilis in Protestant Europe. Paracelsus (1493-1541) formulated mercury as an ointment because he recognized the toxicity and risk of poisoning when administrating mercury as an elixir. Mercury ointments continued to be used well into the 19th and early 20th century. The mercury, or 'blue mass', pills shown in the print were popular from the 17th to 19th century and used mercury in its elemental form or compound form, usually mercurous chloride (also known as calomel). The first effective treatment for syphilis, Salvarsan, was only found in 1910 — five years after the causative bacterium was identified by Fritz Schaudinn (a zoologist) and Erich Hoffmann (a dermatologist). Salvarsan was developed by Nobel Prize winner Paul Ehrlich and his Japanese assistant Sahachiro Hata. Salvarsan and its more stable and soluble version, Neosalvarsan, were arsenic derivatives and treatment was affected by severe side effects. It would be the 1940s when penicillin would finally be proven to be effective against syphilis and it remains the antibiotic of choice to this day. Syphilis can now be cured with treatment but in Hogarth's day, patients would eventually succumb to the disease if they had not already been fatally poisoned by the mercuric treatment (Wong '16). At Hot Springs the hypocrisy was amplified by what is presumed to be the misdiagnosis of common chigger and bug bites on the genitals, as immaculate contracted syphilis,of people pursuing a free bath, and treated with mercury that would cause neurological symptoms similar to tertiary syphilis and death.

Vincent Walker Foster Jr. (January 15, 1945 – July 20, 1993) was an American attorney who served as deputy White House counsel during the first six months of the Clinton administration. Foster had been a partner at Rose Law Firm in Little Rock, Arkansas, where, as The Washington Post later wrote, he rose to "the pinnacle of the Arkansas legal establishment." At the White House he was unhappy with work in politics and spiraled into depression, and in July 1993, he was found dead of a gunshot in Fort Marcy Park. Five official governmental investigations, including the US Park Police in whose jurisdiction the suicide took place, ruled his death a suicide. On May 8, 1993, Foster gave the commencement address at the University of Arkansas Law School, his alma mater, and said: The reputation you develop for intellectual and ethical integrity will be your greatest asset or your worst enemy. You will be judged by your judgment. ... Treat every pleading, every brief, every contract, every letter, every daily task as if your career will be judged on it ... There is no victory, no advantage, no fee, no favor, which is worth even a blemish on your reputation for intellect and integrity. ... Dents to the reputation in the legal profession are irreparable Maris et al '00). One faculty member listening to it recalled telling another that it was "the most depressing graduation speech I had ever heard, in both content and manner" (Gormley '10) A friend of Foster's has said, "Look, it's just crazy, right? You get one dent and it can never be fixed? In Washington, you get them all the time. You get twenty dents and you go to the body shop. Vince couldn't see that, apparently " (Von Drehle '93)

Four days after the speech, the White House travel office controversy erupted. Foster was the target of several critical Wall Street Journal editorials in June and July 1993, with titles such as "Who is Vincent Foster?" He became quite upset over the travel office matter and the possibility of a congressional hearing at which he might have been called to testify. Disliking the public spotlight[13] and suffering

from continued weight loss and insomnia, he considered resigning his position but feared a personal humiliation upon returning to Arkansas (Von Drehle '94). Struggling with depression, which after his death was assessed as clinical depression. Foster was prescribed the anti-depressant medication trazodone over the phone by his Arkansas doctor, starting with a low initial dosage (Deparle '93). The next day, Foster was found dead in Fort Marcy Park, a federal park in Virginia.[23] He was 48 years old. An autopsy determined that he was shot in the mouth and no other wounds were found on his body (Beyer '93). A draft resignation letter was found torn into 27 pieces in his briefcase. The letter contained a list of grievances, including, "The WSJ editors lie without consequence" and saying, "I was not meant for the job or the spotlight of public life in Washington. Here ruining people is considered sport." His funeral mass was held at the St. Andrew's Cathedral in Little Rock. Bill Clinton gave a eulogy in which he recalled their boyhood times together and quoted a line from Leon Russell's "A Song for You": "I love you in a place that has no space and time." Foster was buried in Memory Gardens Cemetery in his hometown of Hope. Foster was survived by his wife and three children (Deparle '93).

Clay Farrar, November 27, 1950 – February 27, 2021 died at the age of 70. He was born and raised in Hot Springs. Farrar was retired, having previously been a partner in the Hot Springs law firm of Farrar and Williams PLLC. Former President Bill Clinton attended the wake. Like his father, the late Clayton Farrar, Sr and his grandfather, the late Virgil Evans, Clay specialized in trust and estate planning matters. He was a graduate of Rhodes College and SMU Law School. Clay is survived by his wife, Kathy Kelley Farrar with whom he was married for 40 years. He is further survived by two daughters; Kellye Wulfers Lopez, a designer (married to Romeo Lopez) and daughter, Lara Farrar, an international freelance journalist. He is also survived by his sister, Frances Ellen Smith of Clarksville, Arkansas. His parents, Clayton and Dana Farrar, preceded him in death. Since the 1980's Clay was active in community affairs including having served as president of the Hot Springs Chamber of Commerce, National Park Rotary Club, and the Hot Springs 50 for the future. Farrar led efforts in the 1980's to revitalize the National Park in Hot Springs and was instrumental in procuring federal funds for the redevelopment of the Fordyce Bathhouse as the National Park Visitor Center. Recently, he served as the chairperson of the Chamber of Commerce committee that took on the challenge of repurposing the large ACTI complex (formerly the Army Navy Hospital) located in downtown Hot Springs. In the last several decades, Clay has written extensively about local history including over a dozen articles in the Garland County Historical Society's annual publication. He has also written a monthly column about Hot Springs history for the Hot Springs Sentinel Record. He also wrote scripts for a number of charitable events that honored various individuals. Farrar was a member of the Hot Springs National Park Rotary club for over forty-two years. He served as annual program chairperson for five separate years. In 2016 clay wrote and produced a video celebrating the hundred year history of the club. Clay's wishes were to be cremated, and his ashes scattered on Jack Mountain overlooking the Hot Springs community that he loved. Officials with the Greater Hot Springs Chamber of Commerce on Monday noted Farrar's recent work on the Army and Navy hospital building. "Clay spearheaded an effort to save the former hospital -- where, interestingly, his parents first met many years ago -- and had spent the past year and a half fighting for its preservation by enlisting a local committee via the Chamber as well as gathering numerous other advocates on the majestic building's behalf" (Gregory '21).

9. Conflicts of Interest

Most recent histories of Hot Springs describe it as a haven for bootlegging and gambling gangsters at odds with the many churches. The pass-card application, filed on 22 March at the USPS office, verified on 31 March, worked for a $150 file search under 22CFR§51.51 and 22USC§214. The State Department reports that it will arrive on 24 April, it might take another ten days to receive all the supporting documents. With this document done on April 20, I should gone by May, without a refund of the $60 expedited processing under 22CFR§51.56(d) and 22USC§214a. After a decade of statelessness, following five years of heart disease, and a heart attack (ha) on Hospitals & Asylums (HA) incidental to having my quasi-validated ID thefted by the Hot Springs National Park police, I hope this new ID is not a decade of heart attacks trying my improved medical knowledge. The presumed methicillin resistant *Staphylococcus aureus* (MRSA) heart attack was sterilized with a swim in a saline pool but the lesion did not heal until treated with Hawthorn berry, the supreme herb for the heart (Gladstar '12). The same college student MRSA assault may also be the cause of the diabetes epidemic obliterating the Islets of Langerhans at Hot Springs in people who ate a whole cheesecake rather than the pound of beef that healed a broken foot, it is very flatulent to the digestion. The many pre-diabetics in Hot Springs suffering MRSA pancreatic infection should try Epsom salt, saline or chlorine swim to sterilize the infection and treat the lesion and insulin depletion with onions, garlic, cinammon and Gingko biloba (Sanders '19: 331-32).

It seems best for the judge to assume Sanders, Tony J. is done. It remains for the magistrate to see if the Superintendent of Hot Springs National Park *plaintiff*, General Services Administration, Secretary of Housing and Urban Development, Advisory Council on Historical Preservation and US Army respond within 30 days to the summons of 20 April for the occasion of the 189th anniversary of Hot Springs Reservation or on 20 May a default judgment shall be ruled against Hospitals & Asylums (HA), District Court and probably appearing plaintiff, being party to the negligent abandonment of the Army and Navy Hospital we seek competent federal authorities to renovate under Rule 2 & 4 Fed. Civ. P., 24USC§18 and §20. The District Judge may grant the Interior Secretary leave to appeal the unauthorized disbursement of energy revenues to states pursuant to 28USC§2349. Having produced the first legible HUD budget in 2020 HA is petitioning HUD Secretary Marcia L. Fudge to operate a federal budget clinic in a free residential office, water, electricity, wifi, with smoking, one marijuana grow light and a Hospitals & Asylums, title24uscode.org sign on the door privileges under 24USC§153. Arkansas however has not legalized recreational marijuana, nor is there a free bath at the hot springs yet, but by the middle or end of a five year action plan both these obstacles to wintering in Hot Springs will hopefully be overcome under 24CFR§905.200. If it pleases the 66 HUD offices I could pay $6 for the $5 indigent filing fee and $1 to purchase the Army and Navy General Hospital.

My pre-eminent conflict of interest involves my personal interest in finding a new winter home to replace that of my bio-terrorist family in State of Oregon, the District Court for the Western District of Arkansas is obligated to charge with the harbor and concealment of terrorists in Jackson County under 18USC§2339(b) for biological weapons §175, chemical weapons §229, arson §844 and destruction of energy facility §1366. Republicans may be unintelligible international criminals but Democrats domestic violence their nerds and the Trail of Tears does not end in Arkansas. The Oregon Supreme Court and Medical Board must be fined for delay in regards to the removal from office and debarment of the permanently reading disabled divorce judge, magistrate and mother, a physician of retirement age, for the crime of terrorism under 18USC§2331 complimentary with every federal case. Although judges would not normally be removed from office before the post-fire election avoiding Jackson County District Attorney and Commissioners, who seriously degraded the quality of life in that area, poisoning is far too serious a crime to ignore. The pseudo-ephedrine, statin and other prescription

drugs abused must be seized from that Circuit Court Security under 21USC§331-§333 and the animal research laboratory kegs of cardiotoxin must be seized by the Secretary of Health and Human Service from my Mom, Jackson County Court Security and University of Cincinnati medical campus in Ohio under 42USC§262. The judge failed to appear after the High Court and I had them schedule a trial, the perjuring magistrate said I could attend after poisonously evicting me from the settlement hearing. Instead of appearing for trial, where court security was isolated as the physical poisoner at the beck and call of the clerk, it appears that the judge leaked the brief I submitted to him to the FBI/DEA, beginning the current spate of rampage shootings falsely associated with my interstate references, including the alleged suicide death of retired estate attorney Clay Farrar, chair of the Committee on the Future of the Army and Navy General Hospital on February 27, 2021, the President accidentally continued to the Education Department with his unaccountable proposal to forgive all delinquent student loans, the collection attempts of which have never happened without rampage shootings.

State officials and rich people are incorrigible abusers of the OASDI tax loophole that needs to be repealed from Sec. 230 of the Social Security Act under 42USC§430, with the Tax Cuts and Jobs Act (TCJA) that arose from abuses of the same County Court for time to heal the federal budget and coronavirus disability. Short of privately settling the violently dishonored, previously agreed to college fund for descendants, the only legal means available for the Oregon Supreme Court to dismiss my mother's never-ending post-divorce bioterrorism from the corrupt County Court seems to be to debar all involved, before replacing the corrupting District Attorney and Commissioners under the XXV Amendment to the US Constitution. The medical board would care for my mother's retirement and ensure I receive up to half of my mother's determined retirement benefit pursuant to Sec. 202(d)(1) of the Social Security Act under 42USC§402(d)(1). The basic charges against the State of Oregon are the importation of some unwashable cardiotoxin from the University of Cincinnati medical campus and being a major criminal exporter of dimethoxymethylamphetamine (DOM) that causes a three day panic attack followed by six month recovery from severe mental illness if not washed off with water.

Exposure to pseudoephedrine, manufactured from Ephedra (Mormon tea) found in the Great Basin National Park area of Utah and Nevada, shrinks brains in such a way the judge cannot contest charges and publish, and is assumed to be a primary reason, in conjunction with incessant post-Windows 8 computer hacking by the FBI, that the US Supreme Court has not published their judgments since 20 June 2019. Although pseudo-ephedrine clears the sinuses and is indicated for temporary relief of all sorts of bacterial and viral infections, it is highly ill-advised for use to treat coronavirus and it is interesting to note that its presumed abuse of the Supreme Court precedes the pandemic. Pneumovax 23 is recommended to prevent meningitis of pseudo-ephedrine and/or statin shrunken brains.
Under considerable duress, mostly by the FBI, DEA and their informants, and threat to life and liberty of self and others, the Attorney General has evidently not been able to provide any petitioners with torture free security or dismiss torturers within their ranks, since 2010, one year after torture state was tampered with. Speaker of the House Nancy Pelosi is to blame due to her position on the Permanent Select Committee on Intelligence that basically consolidates all the federal agencies that need to be abolished and disqualifies her from the high office she uses to torture US politicians and scholars. Torture statute must be amended to comply with Arts. 2, 4 and 14 of the CAT (1987) by repealing the phrase “outside the United States” (tampered in 2009) from 18USC§2340A(a) and Exclusive Remedies at 18USC§2340B to: The legal system shall ensure that the victim of an act of torture obtains redress and has an enforceable right to fair and adequate compensation, including the means for as full rehabilitation as possible. In the event of the death of the victim as a result of an act of torture, their dependents shall be entitled to compensation under Art. 14 of the Convention against Torture and

Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) (1987).

The elder law firm of Farrar and Williams PLLC appears to have brought this eulogy to the US Supreme Court in pursuit of revenge – the complimentary impeachment of a state judge with every federal case. The letter included a claim to have impeached Hillary Clinton, murderer of Bill's lovers, "shark bait" to a now clinically depressed yacht bodyguard and both of my grandmothers, was dismissed from my blog posted defense against the email infringement of the FBI on her election campaign that killed sanderstony@live.com. In addition to informing them that social security beneficiaries must call their direct deposit institution to collect their tax rebate, I would like to advise Farrar and Williams PLLC from my experience with the zombie international trade law firm Sanders, Squire and Demsey LLC. Law firms who go by the name of their deceased founders are "zombie law firms". They infringe in a bad way on the families, careers choices and heart health of everyone who has such names and most conspicuously, do not employ or respond to anyone by that name, no matter how much political power their senior partners get therefrom and then lose and never get back, ie. prospective federal budget surplus, country by country international trade statistics, virginity and HIV status of the Customs Court Act of 1980 going by the name of Court of International Trade of the United States (COITUS) (Ginsburg Circuit Justice). Lawyers Adam Williams, Tiffany Tucker and Wesley Harris are hereby tasked with publishing on their website such a good obituary of Clay Farrar, including select writing on, that they feel free to change the name of their law firm to Williams, Tucker and Harris or some other living combination of their choosing such as Tucker, Harris and Williams (THaW). It is mentioned in the US Supreme Court case: To change the name of either (partner) spouse by facilitating the use of the original, maiden, name on all divorce and probate filings '. I strongly counsel them to publish an obituary regarding the alleged suicide and any compensation to the Farrar estate (family) and collection of his written works to justify the somewhat expensive and extremely time consuming grieving process of changing the name of their law firm to that of their living partners pursuant to the disposition of the effects of deceased persons under 24USC§420 and 36CFR§2.22(c)(4) that refers to the Uniform Disclaimer of Property Interest Act (1999). The Committee on the Future of the Army and Navy Hospital has continued in the news media the day after Farrar's death, as if the disclaimant Chair did not exist pursuant to ARC §28-2-206(b)(3)(A). A future interest held by the disclaimant is not accelerated in possession or enjoyment under ARC28-2-206(b)(4). Silence does not redress the distressing shortage of cause of death investigation in Hot Springs obituaries, many of whom are very young, nor white out by subsequent Sentinel-Record online news articles on the topic. The law firm of Farrar and Williams is advised that disclaimed interest passes as if the disclaimant had died immediately before the time of distribution, unless by law, and as described above, the disclaimed interest would pass to that person's estate, specifically any of Farrar's descendants who are qualified to be partners in the law firm, otherwise entitled to condolences. If no descendant of the disclaimant survives the time of distribution, the disclaimed interest (in the name of that law firm) passes to those persons, (Tucker, Harris and Williams), including the state but excluding the disclaimant, (Farrar) under ARC§28-2-206(b)(3)(B)&(C).

It is highly suspicious in the wrongful alleged suicide death of Clay Farrar that while walking around the Ranger station attempting to get into the office, that was closed due to coronavirus, to use their library to get historical information regarding the Army and Navy General Hot Springs three National Park Police, and civilian park employee observer, were automatically cited with "identity theft" for fraud and related activity in connection with identification documents, authentication features, and information under 18USC§1028 because their leader insisted his special training in identity theft warranted his trial for aggravated identity theft under 18USC§1028A(b) pursuant to 18USC§2332b(g)

(5)(B) despite being informed that the last such identity theft by the organized arson conspiracy of Yosemite National Park burned Oregon and California. The commanding officer complimented my "Icon One Thousand" t-shirt, I got free with every 1,000 fires. After some delay the park police informed me that my friends now call me Tony. My ID is probably as valid as ever. The National Park Service and I are in agreement that it will costs millions of dollars to abate and demolish the hazards posed by lead, asbestos, mold and structural weaknesses and this will require explosive or equivalent demolition power under §844. Although the National Park Police are allowed to possess firearms on federal property their armed aggression regarding the property may have aggravated the FBI conspiracy suicide death of Clay Farrar under §930(d). Farrar may have been in error to trigger the vandalism charge against the homeless, with little evidence to support such allegations under 36CFR§2.31(3). He would have doe better to perceive the homeless as prospective HUD clients with whom he must join to occupy the hospital and destroy the dangerous abandoned buildings in order to provide the free bath for the indigent to wash off dimethoxymethylamphetamine (DOM) from Oregon, with water before it causes a three day panic attack and six month recovery from severe mental illness. Retired attorney Farrar's writing was highly functional for a lawyer these days, whose brains tend to be shrunken by pseudo-ephedrine and statin exposure, but his unwarranted, cruel and unusual obsession with vandalism by the homeless, he claimed was the number one priority for the future of the Army and Navy Hospital, probably indicates that his recovered but still shrunken brain had become infected with pneumococcal meningitis best treated and prevented with Pneumovax 23. I am very grateful for his work as Chair of the Committee on the Future of the Army and Navy Hospital, where his parents met. It is important to note that they do not have any no trespassing or other signs around the Ranger station on whose doors are posted a notice regarding COVID-19. The computer hacking was transient but persists under §1030(a)(1) (relating to protection of computers), 1030(a)(5)(A) resulting in damage as defined in 1030(c)(4)(A)(i)(II) through (VI) (relating to protection of computers). The armed defense does aggravate their COVID-19 quarantine preventing access to park literature normally provided under §1362 (relating to destruction of communication lines, stations, or systems) that must condemn the legal reference by the Department of Justice to irrelevant cases involving violent confrontations between officers and drug dealers although since Windows 8 it is the FBI, DEA, Attorney General, old school cops, new generation of illiterate lawyers, DEA registered physicians and FBI informing nurses who are shrinking the brains of the High Court with pseudo-ephedrine and statins as well as extensively hacking their computers, obstructing the mails and communications generally to such an extent the US Supreme Court has not published since June 20, 2019. The prevention of access to literature regarding the Army and Navy General hospital far exceeds $1,000 in §1361 (relating to government property or contracts). In conclusion our conspiracy to destroy buildings within special maritime and territorial jurisdiction of the United States §1363 is completely justified to improve the health, safety and beauty of the property for the enjoyment of future generations pursuant to the restoration of 16USC§1 (2013) to create a common law with 54USC§100101(a) and stop being so civil and criminal. The identity theft was not warranted. They should have taken me into their Forestry Laboratory and shown me their literature.

The aggravated identity theft of the National Park Police made the grave error to heart attack (ha) Hospitals & Asylums (HA). I had progressively worse heart disease for about four years, from when Milan Babic (innocent) and Slobodan Milosevic died in prison in 2006, of that same disease, until my drivers license expired a decade ago. I pray my 10 year pass-card is not afflicted. Although my medical knowledge has improved after studying medicine heart disease is a painful and deadly condition one should not be exposed to from one's ID. My primary aggravated identity theft complaint is that a nursing student immediately moved into the library, befriended me, and in two days had

assaulted me with what turned out to be methicillin resistant *Staphylococcus aureus* (MRSA) heart attack (ha) right after I had eaten more than a pound of beef that cured my broken foot, and right before I couldn't digest two hamburgers. She called herself Emily but a boyfriend of hers called her Sarah and she got another boyfriend's name wrong. Lest there be any doubt they were there to aggravate the identity theft. She claimed to have a psychology degree and was finishing her nursing degree at John Hopkins University. Neither she nor her army of boyfriends on "Gitmo scholarship" have returned to the library. After buying a new outfit to unecessarily redress the unwashable cardiotoxin, the signature "congestive" heart failure turned out to be MRSA, with excruciating toxic shock syndrome from concurrent Streptococcus infection reduced to slime. I swam 24, 1/2 laps at the YMCA competition, to sterilize the MRSA and although my heart is still a bit hardened I have my appetite back, but the lesion did not go away until it was treated with Hawthorn berry purchased from the large Walmart. I was in error to advise the YMCA competition that the perpetual care fund of the prospective Army and Navy General Hospital "free" public swimming pool was up to the Navy medic who rampage shot wounding two at a commercial center before being killed returning to base. I now swear by the Department of Army. Technical Manual. Swimming Pool Operation and Maintenance. TM-5-662. 28 February 1986.

The magistrate is sought to seize and delete any personally identifying record from the Park Police. No agency shall disclose any record which is contained in a system of records by any means of communication to any person, or to another agency, except pursuant to a written request by, or with the prior written consent of, the individual to whom the record pertains under 5USC§552a(b). Discipline of park police abusing their authority to act without a warrant is treated to the same tort as local law enforcement under 16USC§1a-6 (2013) and 54USC§102701 pursuant to the commanding officer non-judicial punishment of the superintendent under 24USC§419(a)(4). To ensure "non-recidivism" a Bachelor degree is especially required to be a law enforcement officer. Military training does not suffice although it is beneficial and mandatory. Rangers invariably yearn to lay their arms down at my feet and serve in a more professional capacity, but under-education and pseudo-ephedrine impair their ability to do so without committing the police training crime of fraud and related activity in connection with identification documents, authentication features, and information under 18USC§1028 a more educated officer would not have been so intent upon to better enjoy the benefits of friendship and avoid conviction of aggravated identity theft under 18USC§1028A. To ease this transition a $100,000 fine is proposed to be transferred from law enforcement to complete the trail to Lake Hamilton and the Interior Department shall make more funding available to connect the Sunset Trail with the Ouachita National Recreational Trail before the pool and hot tubs are opened at the Army and Navy Hospital.

Appendix: Army and Navy Hospital Federal Budget Clinic Proposal

HA is petitioning for a free residential office and utilities in the rehabilitated Army and Navy Hospital at Hot Springs National Park pursuant to 24CFR§70.1 *et seq*. 24USC§18, §20 and §422. To make $62.9 billion federal outlays FY 21 HUD needs 70 offices and $70 billion FY 24 (Revelation 13:10). HA needs a federal budget clinic in a national park with a free heated swimming pool. Battle Mountain Sanitarium Reserve in South Dakota might also prefer HUD to the VA under 24USC§153 and §154.

The Administrator of General Services may make contracts for the preservation, sale, or collection of property, which may have been wrecked, been abandoned, or become derelict under 40USC§1309. Abandoned property shall be disposed of by the park superintendent under 36CFR§2.22. Federal agencies undertaking a project having an effect on a listed property must provide the Advisory Council on Historic Preservation a reasonable opportunity to comment in accordance with Section 106 process

of the National Historic Preservation Act of 1966 under 36CFR§60.2(a) and §800.1 *et seq*.

The proposal is to preserve, rehabilitate and occupy the Army and Navy General Hospital and Nursing Building, Ranger Station and Forestry Laboratory, controversially demolish all of the other 31 buildings in order to restore parklike conditions and reconstruct free bathing for the indigent, with a large, Olympic size, naturally heated, swimming pool and hot tubs that are free and open to the public 24/7 pursuant to the Secretary of Interior's Standards for the Treatment of Historic Properties under 36CFR§68.3 and 16USC§361. Native Americans told white settlers no tribe claimed the hot springs, but that all tribes bathed in the healing waters of the springs (Paige & Harrison '87: 22)(Scully '66: 5-6).

Modernization, development and demolition are allowed pursuant to a 5-year action plan by the Capital Fund Program (CFP) under 24CFR§905.200. Rehabilitation is estimated to cost $10 million. The US Army might pay pursuant to Sec. 7 of PL 86-324 of 21 September 1959. The EPA must ensure that asbestos-containing waste material from stripping and removing abatement operations is sealed in a leak-tight container while wet, labeled, and disposed of properly in a landfill qualified to receive asbestos waste under 40CFR§61.145.40. When the play area is finished all soil contamination must be abated under 40CFR§745.227(h)(4) and (e)(7). To fulfill the promise to provide free baths for the indigent under 16USC§361 the Interior may provide Hot Springs National Park with $500,000 annually for the construction, operation and maintenance of the free swimming pool and hot tubs under 16USC§2501 *et seq*. after completing cross-connecting trails to Hamilton Lake and Ouachita National Recreational Scenic Trail under 16USC§1245.

Former HUD Secretary Suan Donovan was appointed OMB Director after producing the first mathematically accurate HUD budget request, but it was not supported by the detailed ledger and the claim to be the only agency to ever enter an accurate budget request in the OMB historical tables did not stick. Former President of the United States and Governor of Arkansas Bill Clinton produced the first federal budget surplus 1999-2000 but his generally accepted accounting practice (gaap) does not sustain the claim to have produced a balanced budget.

Although the Treasury generally produces an accurate account of revenues, an accurate estimate of outlays must be tabulated by laboriously annually reviewing idiosyncratic agency budgets until automated. To redress the golfers of the previous administration the plan is to produce an accurate ledger that sustains 2.5% agency, 3% services, 4% disability and 6% retirement inflation. To achieve a budget surplus in time Congress must repeal the Tax Cuts and Jobs Act of 2017 to restore >7% annual individual tax revenue growth.

To spare the stock exchange the immediate cost of coronavirus relief bills and all federal outlays in excess of 3% of GDP deficit is believed to be counterfeited until the US dollar is devaluated pursuant to the Marshal Lerner Condition pursuant to 19USC§4421, 22USC§5301 *et seq*. and 2020 Revised estimates: effect of changes in rates of exchange and inflation Report of the Secretary-General A/74/585 of 11 December 2019.

A. Simplified Interior Budget Request Guesstimate

Interior Sec. Deb Haaland, is the first Native American Cabinet Secretary pursuant to equal employment opportunities without discrimination on the basis of race, color, religion, sex, national

origin, handicap, or age in the Interior Department and Forest Service in Title VII of the Civil Rights Act of 1964 under 42USC§2000e-16(e) and E.O.11478. The Secretary must be made to understand in this section how to correct the complex errors of her plump oil lobbyist predecessor and justify the federal budget request for 2.5% agency and 3% park service and Indian affairs growth FY 21 – FY22 pursuant to the Anti-deficiency Act of 1982 under 31USC§1515. The Interior budget-in-brief has always failed to justify their budget request by disclosing their profit as undistributed offsetting receipts, assets which are used by the Treasury to reduce the deficit by being the first funds to pay for the next year's budget. The plump Trump administration unnecessarily discriminated against 3% Indian Affairs growth. A deficiency is owed, but it is not so much that a supplemental is needed. Hyperinflation in permanent appropriations for the Office of Surface Mining Reclamation and Enforcement (OSMRE) is due to overestimation of United Mine Workers Health Benefit Plans (UMWA). Hyperinflation in permanent appropriations for the Interior Office of the Secretary is as disappointing the Secretary's decline in current appropriations is depressing. The hyperinflation is attributed to an unauthorized switching of Mineral Lease and Associated Payments row to permanent appropriations, from receipts, FY 20 concurrent with the Secretary's current appropriation impoverishing invention of the Office of Natural Resource Revenues (ONRR) that must be abolished because it was never authorized by Congress. Congress does not honor ONRR. Treasury energy payments were never authorized to be distributed to any state but Alaska under Sec. 20001(b)(5) of the Tax Cuts and Jobs Act (TCJA) of 2017 (P .L . 115-97, Dec. 22). As much as $2 billion in revenues could be spared, if unauthorized energy payments to state are terminated. Otherwise total budget authority of the Office of the Secretary spending is capped at zero growth, and there are only $911 million undistributed offsetting receipts. Title X of the Congressional Budget and Impoundment Control Act of 1974 (ICA), that created the House and Senate Budget Committees and the Congressional Budget Office, does not apply to budget authority proposed to be rescinded under 2USC§684(c) for appeal under 28USC§2349.

The Bureau of Indian Affairs was established in 1824 under the War Department and was transferred to the Department of the Interior, originally created by Congress as the Home Department March 3, 1849. Interior manages more than 480 million acres, more than 671 million acres including 191 million acres of National Forests, or about 20 to 28 percent of the land area of the United States, 700 million acres of subsurface minerals, and nearly 760 million acres of submerged land in seven marine national monuments. The Department has jurisdiction over 1.7 billion acres of the Outer Continental Shelf. Interior manages 417 units of the national park system, 566 national wildlife refuges, 153 national forests, 72 fish hatcheries, 21 national conservation areas and similarly designated areas, and 27 national monuments in BLM's national conservation lands. Over 488,000 acres of high-priority abandoned coal mine sites have been reclaimed through the OSM's Abandoned Mine Lands program. FWS acts to protect over 2,300 endangered and threatened species, more than 1,660 of which are in the United States. The Department maintained an 'Indian email war FY14-FY20' with 567 federally recognized Tribes in the lower 48 States and Alaska and provides support to a service population of more than two million people with 56 million surface acres and 59 million acres of subsurface mineral estates. There are 96 BIA-funded corrections programs and 190 bureau and tribal law enforcement programs. The BIE provides education services to 47,000 individual students in 23 States attending 183 elementary and secondary schools and dormitories and supports 33 BIE-funded community colleges, universities, and post-secondary schools.

Interior has nearly 70,000 employees located in approximately 2,400 locations across the United States, Puerto Rico, U.S. Territories, and Freely Associated States. The Forest Service employs 33,000 for a

total of 103,000. Interior benefits from approximately 580,000 volunteers who provide more than 10 million hours of service, valued at an estimated $243 million per year. Annually, more than 67 million visits are made to BLM public lands, nearly 324 million visits to national park units,235 to national forests, more than 50 million visits to national wildlife refuges and fish hatcheries, and more than 30 million visits to Reclamation recreation sites. The Department is the largest supplier and manager of water in the 17 western States. Reclamation manages 492 dams and 338 reservoirs that deliver water to 31 million people and one out of every five western farmers irrigating 10 million acres of farmland. Interior manages lands, subsurface rights, and offshore areas that produce approximately 20 percent of the Nation's energy, including 17 percent of natural gas, 26 percent of oil, and 44 percent of coal. Federal lands also host projects that account for a significant portion of the Nation's renewable energy generating capacity, including 15 percent of hydropower, four percent of wind-power, 42 percent of geothermal energy, and 34 percent of solar energy. Interior provides unbiased, multi-discipline science for use in understanding, mapping, and managing natural resources and hazards. Data are available to the public from over 8,200 stream-gages, 3,100 earthquake sensors and two earth observation satellites–the Landsat 7 and 8 missions, 155,000 USGS-authored citations and 82,000 USGS publications.

Interior Department Balance Available FY 17 – FY 21
(millions)

Year	FY 17	FY 18	FY 19	FY 20	FY 21 request	FY 21 deficiency	FY 22
Budget Request	11,700	11,700	11,700	11,700	12,845	12,845	13,230
Receipts	9,579	10,799	13,246	12,695	12,350	12,350	12,350
Total Interior Revenues	21,279	22,499	24,946	24,395	25,195	25,195	25,580
Total Budget Authority	-19,246	-19,722	-21,997	-22,701	-21,154	-23,986	-24,669
Undistributed Offsetting Receipts	2,033	2,777	2,949	1,694	4,041	1,209	911

Source: Zinke, Ryan (access denied), Bernhardt, David FY 18 & 19, & 21 The Interior Budget in Brief.

After two separate counts of aggravated identity theft related computer fraud by park police the Interior budget had to be bamboozle proofed, the corrected addition errors do not seem to have affected the underlying historical data from the dawn of prehistory in FY 17. A second pass was needed to secure real 2.5% administration and 3% services growth in total budget authority FY 21- FY 22. Total budget authority is the total program cost. To simplify accounting for the federal budget request, the wildly inaccurate concept of current and permanent appropriations are discarded in favor of subtracting total budget authority from total revenues to determine undistributed offsetting receipts - profit. Current

appropriations are federal outlays for agencies. Current appropriations however exceed the budget request and the deficiency is offset by revenues is needed. Permanent appropriations are additional revenue funded operations that contribute to agency budget authority. Permanent appropriations are estimated by subtracting total current appropriations from total budget authority. They make accounting difficult. Total receipts are total receipts. Total revenues are receipts plus budget request. Total revenues are receipts plus budget request. Balance available is estimated by subtracting total budget authority from total revenues, leaving the profit - undistributed offsetting receipts. It is necessary for the Budget-in-brief to sustain 2.5% government, 3% national park services and Indian and Insular Affairs growth, to be remedied by the Anti-deficiency act under 31USC§1515 to ensure balance is available at time obligation is incurred under §1502 FY 22. To offset low revenue growth, after two confused golfers, without excessively increasing the budget request for funds available from revenues, the Interior budget request should increase 3% to $13,230 million FY 22 to harmlessly sound the alarm that undistributed offsetting receipts shall dip below $1 billion for a first time, to $911 million unless an as much as $2 billion in unauthorized energy payments to states are rescinded, whereas some payments may be in good faith it is recommended to reduce energy payments to states by $1.5 billion thereby reducing total budget authority of the Secretary from $4 billion to $2.5 billion.

Interior Total Budget Authority by Bureau FY17 - FY21
(millions)

Year	FY 17	CR 18	FY 19	FY 20	FY 21 Request	FY 21 Supp.	FY 22
Bureau of Land Management (BLM)	1,464	1,459	1,617	1,683	1,342	1,500	1,538
Bureau of Ocean Energy Management (BOEM)	118	129	130	132	126	133	136
Bureau of Environmental Safety (BES)	103	98	136	133	129	134	138
Office of Surface Mining Reclamation (OSMR)	730	888	826	769	634	796	816
US Geological Survey (USGS)	1,086	1,078	1,260	1,272	972	1,284	1,316

Fish and Wildlife Service (FWS)	2,935	2,946	3,037	2,932	2,847	3,140	3,219
National Park Service (NPS)	3,551	3,632	4,085	4,115	3,541	4,156	4,281
Bureau of Indian Affairs (BIA)	2,983	2,974	3,287	2,206	1,985	2,235	2,302
Bureau of Indian Education (BIE)	0	0	0	1,191	945	1,227	1,264
Bureau of Trust Fund Administration (BTFA)	0	0	0	0	255	305	314
BIA subtotal	2,983	2,974	3,287	3,397	3,185	3,620	3,880
Insular Affairs (OIA)	652	629	658	638	619	700	700
Bureaus subtotal	13,622	13,833	15,036	15,071	13,395	15,463	16,024
Departmental Offices							
Office of the Secretary	1,705	2,195	2,559	2,806	3,901	4,071	4,071
Office of the Solicitor (OTS)	66	65	66	67	87	87	89
Office of the Inspector General	50	50	55	56	59	59	61

(OIS)							
Office of the Special Trustee for American Indians (OSTAI)	297	280	258	256	0	0	0
Departmental Offices (DO) subtotal	2,118	2,590	2,938	3,185	4,047	4,217	4,221
National Indian Gaming Commission	18	19	19	20	25	25	25
Department-wide Programs							
Payments in Lieu of Taxes	465	462	516	500	442	512	527
Office of Natural Resource Revenue	0	0	138	147	148	0	0
Central hazardous Materials Fund	10	10	10	22	2	10	10
Wildland Fire Management	943	986	989	952	1,003	1,003	1,034
Natural Resource Damage Assessment and Restoration (NRDAR)	586	354	575	626	623	700	721
Working	67	67	56	56	79	79	81

Capital Fund							
Department-wide Programs (subtotal)	2,071	1,879	2,284	2,303	2,297	2,304	2,373
Bureau of Reclamation (BR)	1,396	1,382	1,698	2,091	1,369	1,951	2,000
Central Utah Completion Act (CUC)	21	19	22	31	21	26	26
Total Budget Authority	19,246	19,722	21,997	22,701	21,154	23,986	24,669
Forest Service	[6,077]	[6,649]	[6,333]	[7,649]	[7,840]	[7,840]	[8,075]
Public Land	[25,323]	[26,371]	[28,330]	[30,350]	[28,994]	[31,826]	[32,744]

Source: Zinke, Ryan (access denied), Bernhardt, David FY 18 & 19, & 21 The Interior Budget in Brief. US Department of Agriculture Budget in Brief FY 21 [Forest Service Transfer to Interior]

Hyperinflation in permanent appropriations for the Office of Surface Mining Reclamation and Enforcement (OSMRE) due to overpayment of United Mine Workers Health Benefit Plans (UMWA) turns out to be an illusory overestimate under the OSMHE FY20 budget justification involving omission of Mandatory Grants to Non-Certified States (AML Funds) row by the Interior Budget-in-Brief. The Office of Surface Mining Reclamation (OSMR) current appropriations must increase 10% from FY 17 to $278 million FY 21. On May 5, 2017, the Consolidated Appropriations Act of 2017 was enacted and Division M Section 104 of the Act, cited as the Health Benefits for Miners Act of 2017. During FY 2019 and 2020, OSMRE will process the UMWAF transfer requests for the three UMWAF health plans and provide funding for an estimated 41,848 beneficiaries. The total transfer request reported in the FY 2020 OSMRE Budget Justification for UNWAF is $331.5 million FY18, $279.4 million FY19 and $323.9 million FY20. This money is reported to be divided between AML fund Interest and Treasury funds, all permanent appropriation. The FY 20 and FY 21 Budget Highlight overestimate $1,926 million FY 20 and $704 million FY 21. For the year where data is available FY 20 is overestimated by $1,602 million. It is therefore proposed to estimate 2.5% growth to $332 million UMWA FY 21 and include $141 million FY 20 Mandatory Grants to Non-Certified States (AML Funds) growing to $145 million FY 21. The OSME needs a more optimistic budget. Payments (or Grants) to States in Lieu of Coal Fee Receipts (Treasury Funds) are down 54% FY20-FY 21 and may need to be increased from $47.3 million or $42.6 million FY 20 to $107 million FY 21 to terminate irregular energy payments to states and sustain environmental restoration.

Hyperinflation in permanent appropriations for the Interior Office of the Secretary is as disappointing

the Secretary's decline in current appropriations is depressing. The hyperinflation is attributed to an unauthorized switching of Mineral Lease and Associated Payments row to permanent appropriations, from receipts, FY 20 concurrent with the Secretary's current appropriation impoverishing invention of ONRR. Since FY 19 total receipts have declined and the 127% increase in Office of the Secretary budget authority wants to be prohibited for hyperinflation to justify 2.5% annual current appropriation growth since FY 17 for the Secretary under 31USC§1517(a)(2) and 1514(a)(2). These non-imaginary, extra since FY 19, 'Mineral Lease and Associated Payments' add up to be distributed states, may be rescinded by the Secretary, to better help Congress to afford to transfer the Forest Service to the Interior, and enable the Solicitor to do the 'Indian email war FY 17 – FY 20' justice under 18USC§1111. Title X of the Congressional Budget and Impoundment Control Act of 1974 (ICA), that created the House and Senate Budget Committees and the Congressional Budget Office, does not apply to budget authority proposed to be rescinded under 2USC§684(c). Treasury energy payments were never authorized to be distributed to any state but Alaska under Sec. 20001(b)(5) of the Tax Cuts and Jobs Act (TCJA) of 2017 (P .L . 115-97, Dec. 22).

Due to moderately hyperinflationary compensation, for budget cut threats in excess of 2.5% annual average, the Bureau of Land Management (BLM), Bureau of Ocean Energy Management, Bureau of Environmental Safety (BES), US Geological Survey (USGS) grow 1% from FY20-FY21. The agreement is that these governments will receive 2.5% annual growth in federal outlays, known as current appropriations, in the future, plus whatever revenues the Interior Department agency is authorized to add to their budget authority, known as permanent appropriations. Permanent appropriations are calculated as the difference between requested and supplemental. The Fish and Wildlife Service (FWS) unconditionally receives 10% growth since FY 17. The Office of the Secretary is due 10% growth since FY 17 in current appropriations if the excessive, hyperinflationary, and inappropriate Mineral Leasing and Associated Payment (revenue?) distribution to States are prohibited under 31USC§1517. The Office of the Solicitor is approved to receive $87 million FY 21. The Inspector General is advised, free of charge, to rescind growth in excess of 2.5% annually under 2USC§684(c). The removal of the Special Trustee from Departmental Offices, after a $1 million decline in revenues FY 20 – FY 21 is dubious, and will hopefully bankrupt the Secretary's Office of Natural Resource Revenue (ONNR) FY 19 reorganization justice. Theoretical reorganization savings are overruled by deficiency in 2.5% growth for government and 3% for services, that is absolutely critical for tribal governments serving a growing population of more than 2 million people. The first step to producing an FY 22 budget is to estimate spending growth by Bureau, to produce a conservative estimate of coronavirus depression, permanent appropriations remain the same as the previous year.

Bureau of Indian Affairs (BIA) current appropriations must be added up to ensure 3% inflation to provide goods and services to a growing population. Reorganization is poor substitute for 3% annual growth in current appropriations for Indian Affairs. It is hoped that BIA and the Interior Secretary can agree on a deficiency. BIA cannot accept the transfer of the Special Trustee to a Bureau of Trust Fund Management (BTFM) towards sustaining 12% growth of combined BIE and BIA spending since FY 17. The Special Trustee or replacement must be fully funded with 12% growth from FY 17 to $156 million FY20 - FY21. The 2021 budget proposes to establish the Bureau of Trust Funds Administration (BTFA) and transition ongoing essential functions currently performed by the Office of the Special Trustee for American Indians (OST) to the BTFA. BTFA manages approximately $5.5 billion, held in roughly 3,600 trust accounts for more than 250 Indian Tribes and about 406,000 open IIM accounts FY 20, 0.5% more than FY 19. The Office of Insular Affairs (OIA) is due more than 12% inflation since

FY 17 in current appropriations to $170 million FY 21 in order to bring budget authority to $700 million FY 21 after more than 42 months (Revelation 13:10) and also in FY 22 to renew, replace or forgo some $230 million annual permanent appropriations for the Compact of Free Association when they expire FY 23. The Interior doctrine that the public land is held in trust for the Native Americans has been profoundly questioned. The meaning is that the public land is to be left in a pristine condition as it was before it was run over by the wheel and urban development, and that the United States has a fiduciary duty to the Native Americans whose land they profitably exploit.

Payments in Lieu of Taxes must be defended against excessive punishment regarding the termination of unauthorized Energy Payments to States FY 19-FY20 with 10% growth from FY 17. $148 million for the Office of Natural Resource Revenue (ONRR) must be impounded with the increase in current appropriations for the Office of the Secretary, where it came from FY 19. Central Hazardous Materials Fund should continue to get $10 million FY 17-FY19, after a $22 million spike FY 20, FY 21 and agree to 2.5% growth. $1,003 million is accepted as 3% growth for Wildland Fire Management FY 21. The Secretary's prescribed burn propaganda must be prohibited. Natural Resource Damage Assessment is a replanting service that must be fully funded with 3% growth from FY 17 plus compensation for the FY 18 cut for $700 million in less than 42 months (Revelation 13:10) plus 3% growth, for a trail mix of fruit and nut trees and other wild edibles, thereafter. The Working Capital Fund is accepted. 3% growth from the previous year for the Bureau of Reclamation spending to stabilize FY 21 and thereafter. $15 million stabilization level for Central Utah Completion Act. The difference between FY 21 current appropriations request is added to the supplemental budget authority request, except for the Offices of Surface Mining Reclamation and Secretary. In the Departmental Offices two novel rows are unexplained and appear to be taking a lot of money. Mineral leasing and associated payments are reported to have increased from $1,773 million FY 20 to $1,809 million FY 21 but these inappropriate payments would be believed to be totally fictitious if it were not for the energy payments to states category. Normal 2.5% government and 3% services, Indian Affairs and Indian Education Bureau inflation must be assured.

Operation Lady Justice has retained 22 prosecutors to review missing and dead Native American cold cases. Homeland Security Cybersecurity demands more information on the suspicious white male and female deaths after a white backpacker emails a tribal Trail Committee. Only local California government, where the Speaker of the House comes from, Canada Refugee Agency and some other random emails are as instantly lethal. An effort needs to be undertaken to redress decades of isolationism of National Parks from pedestrians pursuant to *Citizens to Preserve Overton Park, Inc.* v. *Volpe*, 401 U. S. 402, 410 (1971) and Interior and Forest Service staff, science and labor employment of Native Americans and other racial minority groups in proportion with the district population, in non-law enforcement positions pursuant to Title VII of the Civil Rights Act of 1964 under 42USC§2000e-16(e) and E.O.11478. Tribal government is not equally obligated to employ non-tribal members and consequently there may be a shortage of educated Native American naturalists looking for local federal careers. Care must be taken with tribal government emails and identity theft by park rangers to eliminate deadly FBI/DEA conspiracies pursuant to Art. 81 of the Uniform Code of Military Justice under 10USC§881.

To reduce agricultural fire risk the best thing to do would be to transfer the Forest Service from the USDA to Interior Department. An acre of National Forest is 65 times more likely to burn than an acre of National Park. Furthermore, to redress the single most common cause of forest fire, it is necessary to prevent people from being unlawfully kicked from camps alongside the National Wild and Scenic

Rivers into the flammable duff, and ostensibly accidentally lighting wildfires or more likely inciting FBI arson with their contested tickets, it is necessary to amend the cruel and unusual prohibition of camping on the National Wild and Scenic Rivers to 'urban drinking watersheds, endangered species habitat, private property, military base perimeters or area closures' by amending 36CFR261.58(e)(z). Furthermore, to straighten out the West Coast it is necessary to overturn *Conservation Congress v. Finley* 774 F.3d 611 (9th Cir. 2014) with extreme prejudice against all work in the fo-rest, burn, chip, chop into firewood, scatter or otherwise dispose of all slash piles littering the National Forests between the South Sierra Nevada and North Cascades, for the last time, to restore Pacific Fisher (*Pekania pennanti*) habitat pursuant to the Endangered Species Act (ESA) at 16USC§1531 *et seq*. with the Wilderness Preservation System at 16USC§1131 under penalty of Arson within special maritime and territorial jurisdiction 18USC§81, Conspiracy Art. 81 of the Uniform Code of Military Justice 10USC§881 and Convention on the Suppression of Terrorist Bombings (1997). Because minks were slaughtered for contracting coronavirus and Pacific Fisher are in the weasel family, workers, whether or not they have been vaccinated, must prevent any infection from spreading to his threatened species, by treating any allergic rhinitis, “Pinocchio nose”, by washing the face and taking eucalyptus, lavender or peppermint remedies.

According to a report released in 2019 by the Insurance Institute for Highway Safety the number of pedestrians killed by those drivers has skyrocketed by 81 percent in the last decade. The Department of Transportation must contribute to federal lands transportation programs under 23USC§203 and recreational trails under §206. Before contact trails ran from Coast to Coast. Today the American Discovery Trail is mostly highway and cheap public transportation to national parks and recreation areas has been out of service for half a century. City to city trails and cheap public transportation to the national parks, recreation areas and trailheads are wanted pursuant to the National Trails System Act of 1968 under 16USC§1241-1251. For instance, funding is needed for Hot Springs National Park to complete the Hot Springs Creek path to Lake Hamilton and cross-connect Hot Spring National Park Zig-Zag Peaks Trail with the Ouachita National Recreational Scenic Trail under 16USC§1245. Most of all Congress, without any elaboration upon discovery trails, is advised to insert, The American Discovery Trail, a route of approximately 6,000 miles extending from Cape Henlopen State Park in Delaware to Point Reyes National Seashore in California, extending westward through Delaware, Maryland, the District of Columbia, West Virginia, Ohio, and Kentucky, where near Cincinnati it splits into two routes. The Northern Midwest route traverses Ohio, Indiana, Illinois, Iowa, Nebraska, and Colorado, and the Southern Midwest route traverses Indiana, Illinois, Missouri, Kansas, and Colorado. After the two routes rejoin in Denver, Colorado, the route continues through Colorado, Utah, Nevada, and California. The trail is generally described in Volume 2 of the National Park Service feasibility study dated June 1995 which shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of the Interior, the District of Columbia. The American Discovery Trail shall be administered by the Secretary of the Interior in cooperation with at least one competent trail-wide volunteer-based organization and other affected Federal land managing agencies, and State and local governments, as appropriate. No lands or interests outside the exterior boundaries of federally administered areas may be acquired by the Federal Government solely for the American Discovery Trail at 16USC§1244(a)(31).

B. First Legible HUD Budget of 2020

Marcia L. Fudge is the Secretary of Housing and Urban Development. In regards to the rehabilitation and occupation of the Army and Navy General Hospital by Public and Indian Housing and

reconstruction of free bathing for the indigents at Hot Springs National Park, one day HUD requested the following case file number be cited FHA CAS-9254808-K8Z3H5. Battle Mountain Sanitarium Reserve in South Dakota is suffering threats of termination by the hyper-inflationary employment of the Veterans Administration despite annual rate of spending growth in excess of 10% and might benefit from HUD assistance. Both properties are listed on the National Register of Historical Places. Wherefore HUD is codified in Title 24 of the Code of Regulations, HUD is requested to cite the Army and Navy Hospital at Hot Springs Arkansas and National Home for the Disabled Volunteer Soldiers at Battle Mountain Sanitarium Reserve in South Dakota under 24USC§18, §20, §153 and §154. HUD has a common law duty to preserve Hospitals & Asylums (HA) properties in pursuit of no less than $62.9 billion federal outlays FY 21 and 70 offices and >$70 billion federal outlays FY 24 (Revelation 13:10). HA prays for a free residential office and utilities to operate a clinic for federal budgets at the Hot Springs National Park rehab. Former HUD Secretary Suan Donovan was appointed Office of Management and Budget (OMB) director, but his first ever credible HUD estimate did not at once justify the total with the detailed program ledger, it did not stick and OMB Historical Tables has never got the HUD federal outlays right. The HUD budget is illegible, the summary is not mathematically correct and the ledger requires differentiation between federal outlays, budget authority and lending authority to be added. In fear of the number of the beast, unbecoming a Buffalo soldier whereas the Department of Defense made the leap to >$700 billion in less than 42 months, Sec. Carson unlawfully subtracted, so HUD FY 21 is held by HA and Sec. Fudge must ensure Congress appreciates the first legible HUD budget, ostensibly by furnishing HA with the residential office space for a federal budget clinic in the Army and Navy Hospital, including the HUD office in that facility and at Battle Mountain Sanitarium Reserve that leaves HUD with only one more office to create by FY 24 – free camping. With the new ledger updating the HUD budget took only 2 ½ hours, not including reading of the as of yet unavailable FY 22 budget.

The Department of Housing and Urban Development (HUD) was created at the end of the Great Depression in the Housing Act of 1937 shortly after the Federal Housing Administration (FHA) was created in 1934 to give homebuyers access to reasonably priced mortgages under fair terms. The Department of Housing and Urban Development Act of 1965 created HUD as Cabinet-level agency. HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. FY 21 HUD budget authority is reported be less than outlays, yet employment is projected to increase from 7,670 FY 20 FTEs to 7,784 FY 21 despite the December 22, 2018 Tax Cuts and Jobs Act furlough threat to the Anti-deficiency act under 31USC§1341(a). Reason being, the mathematical deficiency is illusory, it is necessary to prohibit the method as madness under §1517 and continue to redress budget cuts with higher rates of compensation than agreeable 3% inflation from FY 17 whereas authorized apportionments necessitate deficiency or supplemental appropriations under §1515. To correct the HUD budget-in-brief introduction it necessary to define that government outlays are responsible only for administrative and loan guaranty costs, and all other lending costs are privately financed and should not have any incidental effects on governmental receipts or outlays under 2USC§661a(5)(A)(C). It is necessary to prove balance is available, for all accounts, budget authority is more than federal outlays, advanced appropriations are undistributed offsetting receipts, private receipts are more than private outlays, and that total public and private revenues are more than total outlays under 31USC§1502 to overcome dependency on discretionary / mandatory gibberish and enjoin other federal agencies to repeal 2USC§901(b). Manufactured House Fees Trust (MHFT) is the only [offsetting receipts] accepted ($16 million) to reduce federal outlays, the rest are dedicated to private lending programs. Discretionary is redefined to be federal and mandatory to be private. In general housing services spending is estimated to grow 3% annually to compete with inflation in goods and

services. Former Sec. Ben Carson got scared of the number of the beast from FY 17 and wrongfully subtracted private outlays from federal outlays, instead of bravely making the leap from $60 to $70 billion in federal outlay in less than the 42 months limit on persecutions. Sec. Fudge must resist further economic depression and has either received supplementals or must secure them to sustain 3% federal spending growth in the future. In FY 24 $3 billion extra federal outlays, for public housing and free camping, plus normal 3% growth, are wanted to compensate for the cuts since FY 17 and limit the $60-$70 billion persecution of the 66 HUD offices, to less than 42 months by whence HUD should have more than 70 offices and $70 billion. Advance appropriations are synonymous with undistributed offsetting receipts, they are funds left over at the end of the year to pay for the first expenses of the next year budget, they do not count towards budget authority or outlays.

Housing and Urban Development Budget Overview FY 17 – FY 22
(in millions)

HUD	FY 17	FY 18	FY 19	FY 20	FY 21 Request	FY 21 Supp.	FY 22
Federal Budget Authority	58,023	48,034	58,601	56,596	47,997	63,563	66,082
Federal Outlays	48,042	47,703	51,551	56,211	47,406	62,910	65,061
Undistributed Offsetting Receipts	[4,400]	[4,400]	[4,400]	[4,400]	[4,400]	[4,400]	[4,400]
Private Receipts	14,659	10,851	11,565	10,683	8,852	8,852	8,835
Private Outlays	13,417	9,651	10,433	7,082	8,311	8,322	8,761
Budget Authority Total	72,682	58,885	70,166	67,279	56,849	72,415	74,917
Total Outlays	61,459	57,354	61,984	63,293	55,717	71,232	73,822
Loan Limits	931,564	931,532	931,526	931,526	981,526	981,526	981,526
Program Level	1,004,246	990,417	1,001,694	998,805	1,038,075	1,053,941	1,056,443
FTEs	7,911	7,650	7,394	7,670	7,784	7,784	7,862

Source: Carson, Ben. Housing and Urban Development Fiscal Year 2019 & 2021 Budget-in-brief

The supplemental Fiscal Year 2020 budget request for federal outlays was $56.2 billion, -2.9% less

than HUD (Gross) discretionary outlays (Gross) and 8.6% more than (Net) discretionary - exactly the same as the HUD FY 21 Budget-in-brief estimates for FY 20. The FY 21 Supplemental is the first HUD budget that claims to exactly estimate federal outlays, report undistributed offsetting receipts and differentiate between federal and private revenues and outlays. Great care must be used when adding subtotals and totals - make two copies of entered data in scrap file, one for budget authority and the other for outlays, delete unnecessary rows pursuant to the Paperwork Reduction Act under 44USC§3508. After a 0.7% cut FY 17-FY 18, budget cuts are not tolerated anymore and the HUD budget total has been severely punished for their attempted discrimination, with total federal outlays increasing 8% FY 18 - FY 19 and 9% to $56.2 billion FY 20. Total (discretionary) federal outlays for HUD FY 21 are estimated to be $62.9 billion FY 21, a 12% increase from FY 20, rather than -19% decrease to $47.4 billion FY 21. 3% growth from FY 17 or better, the new $5.2 billion FY 21 Moving to Work Program and $50 billion increase to [$550 billion GNMA limit], should settle all foreclosure/ eviction moratorium claims under the Coronavirus Aid, Relief, and Economic Security Act CARES Act by October 2020. Sec. 4022 provides for a foreclosure moratorium and consumer right to request forbearance on Federally backed mortgage loan is extended to multifamily properties under Sec. 4023. There is a temporary moratorium on eviction filings for a 120-day period of eviction relief for tenants in federally-backed housing, who may not be served with an eviction notice from March 27, 2020 until July 25, 2020 and the notice must give 30 days to leave the property (Aug. 24, 2020).

HUD must perfect a consolidated balance sheet to declare federal outlay and program level inflation. A Free Camping […] row is to be included in the Self-Sufficiency Program FY 21 Supplemental and FY 22 to solicit HUD support for city to city to National Trail System trails and planting of a trail mix of fruit and nut trees and wild edibles. HUD shall solicit for $2 billion of new programs of relief no later than FY 23 for FY 24, to make the leap from $66 billion FY 23 to $70 billion FY 24, whereas no persecution regarding the number of the beast shall last longer than 42 months (Revelation 13:10). While two-thirds of HUD personnel may voluntarily work at 66 field offices, that does not mean they can be allowed to persecute themselves and others with the number of the beast. All accounts must be tested for 3% growth from FY 17. To punish budget cuts, incidental retaliatory hyperinflation is treated to agreement or 1% growth FY 20-FY 21 although in excess of 3% inflation from FY 17, and underachievers are granted 3% from FY 17 on the condition that in the future 3% inflation is expected in all outlays.

Housing and Urban Development: Budget Authority, Outlay, Limit FY 17 – FY 21
(millions)

HUD	FY 17	FY 18	FY 19	FY 20	FY 21	FY 21 Supp.	FY 22
Public and Indian Housing							
Tenant-Based Rental Assistance							
Section 8	18,355	18,228	20.313	21,502	16,958	21,717	22,369

Contract Renewals							
Administrative Fees	1,650	1,641	1,886	1,977	1,465	1,848	1,903
Section 8 Rental Assistance (Tenant Protection Vouchers)	110	109	85	75	100	123	127
Advanced Appropriation	[4,000]	[4,000]	[4,000]	[4,000]	[4,000]	[4,000]	[4,000]
Veterans Affairs Supportive Housing	40	40	40	40	40	40	41
Tribal HUD / VASH	7	7	4	1	0	10	10
Mainstream Voucher Renewals	120	119	225	229	310	231	238
Rental Assistance Demonstration (transfer)	[83]	[104]	[89]	[52]	[64]	[64]	[66]
Family Unification Program	10	10	20	25	0	26	27
Mobility Demonstration	0	0	25	25	25	25	26
Disaster Displacement	0	0	0	[6]	0	0	0
Lead Risk Assessment	0	0	0	0	[30]	[30]	[30]
TBRA Outlay	20,292	20,154	20,598	23,868	18,898	23,997	24,741

subtotal							
TBRA BA subtotal	20,375	20,258	22,687	23,932	18,992	24,114	24,837
Self-Sufficiency Program (SSP)							
Family Self-Sufficiency	75	74	80	[80]	[90]	[90]	[90]
Resident Opportunity and Supportive Services (ROSS)	35	35	0	[35]	0	0	[35]
Jobs Plus Demonstration	15	15	15	[15]	[100]	[100]	[100]
Free Camping	0	0	0	0	0	[…]	[1]
SSP outlay subtotal	125	124	95	0	0	0	0
SSP BA subtotal	125	124	95	130	190	190	226
Public Housing Capital Fund							
Formula Grants	1,834	1,822	2,655	2,745	0	2,773	2,856
Emergency /Disaster Services	17	16	20	20	0	21	22
Safety and Security	5	5	10	10	0	10	11
Administrative Receivership	1	1	0	35	0	1	1

Financial and Physical Assessment	10	10	14	14	0	14	15
Lead-Based Hazards	25	25	25	25	0	0	26
Lead Based Water Pipe Testing Grants	0	0	0	20	0	0	0
Rental Assistance Demonstration (transfer)	[36]	[33]	[35]	[31]	0	[32]	[33]
PHC Fund, outlay subtotal	1,892	1,879	2,724	2,869	0	2,819	2,931
PHC Fund, BA subtotal	1,928	1,912	2,759	2,900	0	2,851	2,964
Choice Neighborhoods, outlay and BA. subtotal	138	137	150	175	0	177	182
Public Housing Fund (PHF)							
Operating Subsidy	4,400	4,370	4,653	4,524	3,404	4,928	5,076
Shortfall Protection	0	0	[600]	25	0	0	0
Public Housing Demolition	0	0	0	0	30	0	0
Emergency Disaster	0	0	0	0	10	0	0

Reserve							
Financial and Physical Assessments	0	0	0	0	23	0	0
Administrative and Judicial Receiverships	0	0	0	0	40	0	0
Lead-Based Paint Hazards Competitive Grant	0	0	0	0	35	35	36
Lead Based Water Pipe Testing Grants	0	0	0	0	30	30	31
Rental Assistance Demonstration (transfer)	[110]	[125]	[105]	[62]	[128]	[129]	[133]
PHF outlay subtotal	4,400	4,370	4,653	4,549	3,572	4,993	5,143
PHF, BA. Subtotal	4,510	4,495	5,358	4,611	3,700	5,122	5,276
Moving to Work, outlay and BA subtotal	0	0	0	0	5,185	5,185	5,341
Native American Housing Block Grants							
Formula Grants	645	641	646	646	600	700	721

Technical Assistance	4	3	5	5	0	5	6
National or Regional Organization	4	3	2	2	0	2	3
Competitive Grants	0	0	100	100	0	100	103
Indian Community Block Grants	0	0	0	70	0	70	72
Title VI Federal Guarantees for Tribal Housing Activities							
Program Account	2	2	2	2	0	2	2
Loan Guarantee Limitation	[18]	[18]	[18]	[18]	[18]	[18]	[18]
NAHBG outlays and BA subtotal	655	649	755	825	600	879	907
Indian Housing Loan Guarantee Fund (HLGF)							
Program Account	6	6	0	0	0	7	7
Loan Guarantee Credit Subsidy	1	1	1	1	1	1	1
Administrative	0	0	0	1	1	0	1

Expenses							
Limitation Level	[1,190]	[1,190]	[1,190]	[1,190]	[1,190]	[1,190]	[1,190]
HLFG outlays subtotal	7	7	1	2	2	8	9
Native Hawaiian Loan Guarantee Fund (NHLGF)							
Program Account	0	0	0	0	[2]	2	2
Limitation Level [P.L]	[16]	[…]	[16]	[…]	[…]	[16]	[16]
NHLGF outlays subtotal	0	0	0	0	0	2	2
Native Hawaiian Block Grants outlays	2	2	2	2	0	2	4
NAP outlays and BA subtotal	664	658	758	829	602	891	920
NAP P.L. subtotal	1,224	1,224	1,224	1,224	1,224	1,224	1,224
PIH outlay subtotal	27,511	27,322	28,978	32,290	28,257	38,062	39,258
PIH BA subtotal	27,740	27,584	31,807	32,577	28,669	38,530	39,746
Community Planning and Development (CPD)							
Community							

Development Fund							
Entitlement/Non-entitlement	3,000	2,972	3,293	3,393	0	3,732	3,844
Insular Area CDBG	3	7	7	7	0	7	8
Indian Tribes	60	60	65	0	0	70	72
Disaster Assistance	[9,603]	0	[4,109]	0	0	0	0
Recovery Housing (PL 115-271)	0	0	0	25	0	0	0
CDBG outlay subtotal	3,063	3,039	3,365	3,425	0	3,809	3,924
CDBG BA subtotal	12,666	3,039	7,474	3,425	0	3,809	3,924
HOME Investment Partnerships Programs							
Formula Grants	948	942	1,248	1,347	0	1,360	1,401
Insular Areas	2	2	3	3	0	3	4
HOME outlay and BA subtotal	950	944	1,251	1,350	0	1,363	1,405
Community Development Loan Guarantees (Sec. 108)							
Loan Guarantee	[300]	[298]	[300]	[300]	0	[300]	[300]

Limitation							
Self-Help and Assisted Homeownership (SHOP)							
SHOP	10	10	10	10	0	10	11
Section 4 Capacity Building	35	35	35	36	0	39	40
Capacity Building for Rural Housing	5	5	5	5	0	6	6
SHOP for Veterans	4	4	4	4	0	5	5
SHOP outlay and BA subtotal	44	44	44	45	0	50	52
Homeless Assistance Grants (HAG)							
Competitive Grant Renewals (Shelter Plus Care and Supportive Housing)	2,018	2,004	2,219	2,350	2,486	2,486	2,561
Emergency Solutions Grants	310	308	280	290	280	347	357
National Homeless Data Analysis Project	12	12	7	7	0	13	13

Youth Demonstration	43	43	75	70	0	71	73
Youth Technical Assistance	0	0	5	10	0	11	11
Rapid Rehousing for DV Victims	0	0	50	50	0	50	52
HAG outlay and BA subtotal	2,383	2,367	2,636	2,777	2,766	2,977	3,067
Housing Opportunities for Persons with AIDS (HOPWA)							
Formula Grants	320	318	354	369	297	373	385
Competitive Grants	36	35	39	41	33	41	42
HOPWA outlay and BA subtotal	356	353	393	410	330	414	427
CPD outlay subtotal	6,796	6,747	7,689	8,007	3,096	8,613	8,823
CPD BA subtotal	16,399	6,747	11,798	8,007	3,096	8,613	8,823
Housing Programs							
Project-Based Rental Assistance							
Section 8 Contract Renewals	10,334	10,267	11,319	12,010	12,056	12,056	12,418

Contract Administrators	235	233	245	345	350	350	361
Advanced Appropriation	[400]	[400]	[400]	[400]	[400]	[400]	[400]
Tenant Resources Network	3	0	3	2	6	6	6
Mod Rehab and SRO	244	242	180	213	230	273	281
Rental Assistance Demonstration (transfer)	[99]	[54]	[54]	[40]	[64]	[70]	[72]
PBRA outlays subtotal	10,816	10,742	11,747	12,570	12,642	12,685	13,066
PBRA BA subtotal	10,915	10,796	11,801	12,610	12,706	12,755	13,583
Housing Counseling Assistance (HCA)							
Housing Counseling Assistance	51	50	46	49	41	57	59
Administrative Contract Services	5	4	5	5	5	6	6
HCS outlay and BA subtotal	56	54	51	54	46	63	65
Supportive Housing for the Elderly (Sec. 202) (SHE)							

PRAC Renewals/ Amendments	414	412	524	590	641	641	660
Service Coordinators/Congregate Housing Service Program	75	74	90	100	95	95	98
Senior Preservation Rental Assistance Contracts	10	10	0	0	0	0	0
Other Expenses	3	3	3	3	3	3	4
Wish Demonstration Expenses	0	0	0	0	0	14	14
Aging in Place Home Modification Grants Expenses	0	0	10	10	0	0	0
SHE outlay and BA subtotal	502	499	627	703	739	753	776
Housing for Persons with Disabilities (Sec. 811) (HPD)							
PRAC/PAC Amendments/Renewal	144	143	152	162	170	170	175
Other	2	2	2	40	82	82	85

Expenses							
HPD outlay and BA subtotal	146	145	154	202	252	252	260
FHA Funds							
Mutual Mort. Ins. And Coop. Mgt. Housing Ins. Funds							
Management Housing Insurance (CMHI)							
Administrative Expenses	130	129	130	130	130	146	150
Direct Loan Limitation	[20]	[5]	[1]	[1]	[1]	[1]	[1]
Loan Guarantee Limitation Level	[400,000]	[400,000]	[400,000]	[400,000]	[400,000]	[400,000]	[400,000
MMI/CMH outlay and BA subtotal	130	129	130	130	130	146	151
General Insurance and Special Risk Insurance Funds							
Direct Loan Limitation	[20]	[5]	[1]	[1]	[1]	[1]	[1]
Loan Guarantee	[30,000]	[30,000]	[30,000]	[30,000]	[30,000]	[30,000]	[30,000]

Limitation Level							
FHA outlays and BA	130	129	130	130	130	146	151
Manufactured Housing Standards Program (MHSP)							
Payments to States	2	2	4	5	5	5	6
Contracts	8	8	8	8	10	10	10
MHSP outlay and BA subtotal	10	10	12	13	15	15	16
Other Assisted Housing							
Rent Supplement	5	10	3	0	0	6	6
Rental Housing Assistance (Sec. 236)	15	10	2	3	0	17	18
Rental Assistance Demonstration Transfer	[36]	0	[4]	0	0	[…]	0
OAH outlays subtotal	20	20	5	17	0	23	24
OAH BA subtotal	56	20	9	17	0	23	24
HP outlay subtotal	11,680	11,599	12,726	13,689	13,724	13,837	14,509
HP BA subtotal	11,815	11,653	12,784	13,729	13,788	13,907	15,026

Government National Mortgage Association							
Guarantees of Mortgage-Backed Securities							
GNMA – Salaries and Expenses outlay and BA subtotal	26	26	30	34	31	31	32
MBS Guarantee Limitation	[500,000]	[500,000]	[500,000]	[500,000]	[550,000]	[550,000]	[550,000]
Policy Development and Research							
Research and Technology outlay and BA subtotal	89	88	96	98	95	100	103
Fair Housing and Equal Opportunity (FHEO)							
Fair Housing Initiative Program	39	39	40	45	40	44	45
Fair Housing Assistance Program	24	24	24	24	24	24	25

Fair Housing Training Academy	2	1	2	2	2	2	3
FHEO outlay and BA subtotal	65	64	66	71	66	70	73
Office of Lead Hazard Control and Healthy Homes							
Lead-Based Paint Hazard Reduction							
Lead Hazard Control Grants	58	57	70	76	145	145	149
Technical Studies	2	2	5	5	5	5	5
Healthy Homes	30	30	45	50	45	45	46
Lead Hazard Control Demonstration Program	55	55	64	64	0	0	0
Resident Safety Demonstration in rental assistance portfolio	0	0	0	0	70	70	72
OLHCHH	145	144	184	195	265	265	272

outlay and BA subtotal							
Management and Administration (MA)							
Salaries and Expenses, HUD	1,354	1,346	1,384	1,425	1,497	1,517	1,563
Salaries and Expenses, OIG	128	127	128	138	133	143	147
Information Technology Fund	257	255	285	280	258	288	297
Working Capital Fund	[5]	0	[39]	[42]	[99]	[99]	[102]
MA outlay subtotal	1,744	1,728	1,797	1,843	1,888	1,948	2,007
MA BA subtotal	1,744	1,728	1,836	1,885	1,987	2,047	2,109
(Gross) Federal Outlay Subtotal	48,056	47,718	51,566	56,227	47,522	63,026	65,077
Manufactured Housing Fees Trust	-14	-15	-15	-16	-16	-16	-16
Federal Outlay Total	48,042	47,703	51,551	56,211	47,406	62,910	65,061
Federal BA Total	58,023	48,034	58,601	56,596	47,997	63,563	66,082
Private Offsetting							

Receipts							
MMI Capital Reserve	11,150	7,641	6,887	4,655	6,976	6,976	6,976
GNMA Receipts	138	119	140	132	129	129	129
GNMA Capital Reserve	2,016	1,696	1,987	1,184	1,207	1,207	1,207
GI/SRI Negative Subsidy	676	872	504	622	523	523	523
Private Offsetting Receipts	13,980	10,328	9,518	6,593	8,835	8,835	8,835
Private Budget Authority							
Indian Loan Guarantee	7	14	22	2	0	9	9
Native Hawaiian Housing Loan Guarantee	0	1	5	2	0	2	2
Housing Trust Fund	219	15	248	298	18	18	250
FHA General and Special Risk Liquidating Account	25	25	1,284	792	0	0	0
FHA Mutual Mortgage Insurance Capital Reserve Account	11,150	7,641	6,887	4,665	6,976	6,976	7,200

Housing for the Elderly or Handicapped Fund Liquidating Account	0	259	0	139	110	110	110
Guarantees of Mortgage-Backed Securities Capital Reserve	2,016	1,696	1,987	1,184	1,207	1,207	1,207
Private Budget Authority (Gross)	13,417	9,651	10,433	7,082	8,311	8,322	8,778
Private Receipts	-679	-523	-2,047	-4,090	-17	-17	-17
Private Budget Authority (Net)	12,738	9,128	8,386	2,992	8,294	8,305	8,761
Private Offsetting Receipts	-13,980	-10,328	-9,518	-6,593	-8,835	-8,835	-8,835
Negative Subsidy	[-1,242]	[-1,200]	[-1,132]	[-3,601]	[-541]	[-530]	[-74]

Source: Carson, Ben. Housing and Urban Development Fiscal Year 2019 & 2021 Budget-in-brief

Due to hyperinflation Section 8 contract renewals grow only 1% from the previous year. To reduce demand for contract renewal inflation in excess of 3%, administrative fees are increased 3% annually, 12% from FY 17. Section 8 Tenant Vouchers are also increased 3% annually from FY 17 on competitive basis with the new move-to-work program. To prevent hyperinflation mainstream voucher renewal inflation is limited to 1% FY 20 – FY 21. The mobility voucher is accepted as compensation for Sec. 8 Tenant Protection Vouchers. Disaster displacement is excluded from the outlay total and included in the program level. Advanced Appropriations are excluded from outlay and program level, to be reported as undistributed offsetting receipts to OMB, at the end of the budget outlay and program level totals.

Public Housing Capital Fund growth is limited to 1% FY 20-FY 21 due to hyperinflation. The Self-Sufficiency Program has been used to terminate outlays for certain programs, Family Self-Sufficiency,

Jobs Plus Demonstration, that are now privately financed and Residential Opportunity and Support Services (ROSS) was terminated. The Public Housing Operating fund outlay are increased to 3% inflation since FY 17. Public Housing Demolition, Emergency Disaster Reserve and Financial, Physical Assessment and Administrative and Judicial Receivership proposals are again rejected from the Public Housing Fund. Lead Based Paint Hazards and Lead Waterpipe Testing are transferred from the Public Housing Capital Fund to Public Housing Fund with large funding increases, all around, "shortfall protection" and new obligations are no substitute for 3% inflation in PHF operating funds. Choice neighborhoods is sustained by demand for lead based hazard removal in New York City and elsewhere. The new $5.2 billion Moving to Work (MTW) fund shall settle new COVID-19 pandemic CARES Act 4 month rent/mortgage free petitioners.

Native American Program (NAP) formula grants are automatically increased to $723 million after more than 42 months $600 and $700 million (Revelation 13:10) pursuant to 12% inflation from $646 million FY 17. Other NAP programs are amortized to remain the same as prior year levels. The Native Hawaiian Loan Guarantee Fund changes the name of the proposal from (2 million) credit subsidy to $2 million program account FY 21 outlays to guarantee [$18 million FY 21] loan program level. All Native American and Hawaiian Program are subtotaled. There is room to solicit free camping [...] to promote trail completion, in the Self-Sufficiency Category, for the collaboration of all Public and Indian Housing beneficiaries, in pursuit of federal recognition of HUD collaboration and ultimately HUD outlays for trails and free and legal camping in the wilderness and on city sidewalks and bar certified or court approved indigent defenders thereof. If funds and botanical know-how are available, city and tribal planners are advised to replant a trail mix of fruits, nuts and wild edibles on urban to rural interface trails that should connect the city with the wilderness, cities with other cities and the National Trail System to redress the crime of genocide, eg**.** destruction of or denial of access to food, shelter and other essentials of life pursuant to the Application of the Convention on the Prevention and Punishment of the Crime of Genocide (*The Gambia v. Myanmar*) Summary 2020/1 23 January 2020**.**

The 2021 President's Budget requests $600 million, which is $225 million less than the 2020 enacted levels discriminates against the Native American Housing Assistance and Self-Determination Act of 1996 under 25USC§4111 et seq. While the 2021 request does not include funding for Title VI Loan Guarantee subsidy, it includes up to $30 million in loan commitment authority which will be utilized against remaining unobligated credit subsidy provided in prior years. In January 2017, HUD published *Housing Needs of American Indians and Alaska Natives in Tribal Areas* pursuant to Title VI of the Civil Rights Act of 1964 under 42USC§2000d. The study found that the physical housing problems for Indian households in tribal areas are much more severe than for U.S. households on average. It estimated that between 42,000 and 85,000 Native Americans are "doubled up" with family or friends, they are usually placed by a housing authority, two families to a trailer. because they have no place else to stay and would otherwise be staying in a homeless shelter, a place not meant for human habitation, or living on the streets. In tribal areas, homelessness often translates into overcrowding, and 68,000 units of new affordable housing are needed to replace substandard or overcrowded units. Native American program formula outlays have been persecuted with the number of the beast at $657 million FY 19, $641 million FY 20 and $685 million FY 21 for more than 42 months (Revelation 13:10) and the FY 22 budget must redress discrimination with $700 million FY 21 formula grants, 3% annual growth thereafter, plus constant $179 million spending for the loan guarantee, technical assistance, national or regional organization and new Indian Community Development Block Grant programs, 3% growth in Native Hawaiian programs as well under 24CFR§1.8. Therefore, total outlays for Native

American Programs are assessed at $879 million FY 21, 6.6% more than $825 million FY20 that was 9.3% more than $755 million FY 19. This hyperinflation in Native American Programs is necessary to prevent and punish hypocritical discrimination against the Native American race by a member of the black race, because of the relatively small and affordable size of Native American and Native Hawaiian programs, the hypocritical exploitation of Native Americans by Public and Indian Housing, bearing in mind that public land is held in trust for the Native Americans, the fact that Indian Energy Office subsidy cuts are unopposed by existing massive ugly electrical lines supplying reservation cities, and demonstrated need for public housing and campgrounds on reservations and nearby National Forests. In addition to fully funded Native American and Hawaiian Programs, tribal housing authorities are entitled to a fair share of all HUD programs under 42USC§2000d.

1% growth for CDBG block grant Entitlement / Non-entitlement FY 20-FY 21. Insular area CDBG is sustained at $7 million FY 21. $7.1 billion CDBG budget [Disaster assistance] was inappropriately distributed FY 17 and FY 19 and should have been excluded so as not to cause any irregularities to HUD outlays with [interagency receipts] under 2USC§661a(5)(A). Irrespective of the extra-insolvency of the CARES Act giving, thanks to the margin of error provided by several fictitious OMB rows, Other Defense Civil Programs, Allowances and Other Independent Agencies - the counterfeit t-bonds of the Federal Emergency Management Administration (FEMA), in custody of Customs aka/ Homeland Security, are respectable government [inter-agency receipts] under 31USC§ 5153 that must not incur any sort of deficiency or harmful, e.g. budget cut or program terminations, operation by OMB against the receiver under 31USC§1502. Community Development Loan guarantee limitation level is sustained at [$300 million]. 12% growth for SHOP since FY 17, $1 million addition as compensation for threatened budget cuts in other subprograms. 1% growth for HOME Formula Grants FY 20 – FY 21. 23% growth in Homeless Assistance Grants since FY 17 is accepted. The National Homeless Data Analysis is reauthorized at 3% growth from FY 17. Fast growing Youth Demonstration and technical assistance grow 1% from the previous year. Rapid Rehousing for DV Victims remains at $50 million FY 19- FY 21. 1% growth for Housing Opportunities for Persons with AIDS (HOPWA) formula grants and competitive grants from FY 20-FY 21.

Project Based Rental Assistance hyperinflation is accepted 3% annual growth hereafter. MOS Rehab is estimated 12% growth from FY 17. [Rental Assistance Demonstration]. Housing counseling assistance and administrative contract services are estimated 12% growth from FY 17 to be bumped up to $7 million after three years between $6 and $7 million (Revelation 13:10) in FY 23. Hyperinflation for Supportive Housing for the Elderly (Sec. 202) renewals – PRAC Renewals / Amendments is accepted on the condition of 3% annual growth, henceforth. Wish Demonstration Expenses are accepted substitute for Aging in Place Home Modification Grants Expenses. Housing for Persons with Disabilities FY 21 hyperinflation is accepted on the condition of 3% annual growth hereafter. FHA Fund administrative expenses increase 12% from FY 17. [$1 million] direct loan level, and [400,000] and [30,000] limitation is accepted. Manufactured Fees Trust Fund hyperinflation is accepted and subtotal corrected. Other Assisted Housing get 12% growth from FY 17, no Rental Assistance Demonstration Transfer […] is solicited.

GNMA's $50 billion increase to [$550 billion] is accepted FY 21. Slight GNMA Salaries and Expenses and Research and Technology cut FY 20-FY21 is accepted on the basis of being in excess of 3% annual growth from FY 17. Research and Technology is increased. to 12% growth from FY 17. Fair Housing Initiatives Program is increased to 12% growth from FY 17 while other Fair Housing Activities remain the same. There is complete agreement in Office of Lead Hazard Control and Health

Homes FY 21 budget plus 3% inflation every year thereafter. 12% growth from FY 17 for Management and Administration. Working Capital is accepted FY 21. Manufactured House Fees Trust (MHFT) is the only [offsetting receipts] accepted ($$) to reduce federal outlays, the rest are dedicated to private lending programs under 2USC661a(5)(A)(C).

Manufactured Housing Fees Trust (MHFT) are the only receipts that actually make a valid claim to subtract (-$16 million FY 21) from the Gross Federal (Discretionary) Budget Authority. The other receipts are all private (mandatory) receipts that equal budget authority. MHFT receipts must be relocated to just after Budget Authority (Gross) to calculate Federal (Discretionary) Budget Authority (Net) as if MHFT were the only federal (discretionary) revenue. Although there are other federal revenue funded programs, MHFT is the only program believed to contribute their profits towards HUD general revenues. Other sources of revenue are all dedicated to sustaining private lending operations that do not impact federal outlays or revenues 2USC§661a(5)(A)(C). Private (Mandatory) Programs reflect end of year balances of certain discretionary programs, including updated Native American and Hawaiian Loan Guarantee Balances, that do not incur any deficiency to outlays or revenues. [Housing for the Elderly or Handicapped Fund Liquidating Account] must not be (discriminatorily) [distinguished] from other [Mandatory Balances] because the HECM privately distributes the effects of deceased under 24USC§420.

The 2021 President's Budget must stop inconsistently requesting no subsidy budget authority for the Federal Housing Administration's (FHA) General Insurance and Special Risk Insurance (GI/SRI) Fund, to ensure the $30 billion in loan guarantee commitment authority, and $1 million in direct loan authority, which is equal to the 2020 enacted levels, are adequately financed. The FHA General and Special Risk Program Account terminates FY 21 leaving all funds to the FHA Mutual Mortgage Insurance Capital Reserve Account. The $210.7 billion in loan volume projected for the entire MMI portfolio in 2021 is expected to generate $6.9 billion in negative subsidy receipts, which are transferred to the MMI Capital Reserve account, where they are available to cover any unexpected cost increases for the MMI portfolio. Ginnie Mae is requesting $550 billion in commitment authority, to remain available until September 30, 2022. Ginnie Mae, authorized by Title III of the National Housing Act, as amended (P.L. 73-479; codified at 12 USC§1716 *et seq*.). The agency collects fees for commitment authority sold to approved issuers. Ginnie Mae's outstanding MBS portfolio has grown substantially since the 2008 housing crisis, increasing from less than $445 billion at the start of the 2008 housing crisis to over $2 trillion at the end of 2019. Ginnie Mae guaranteed $451.6 billion in 2019 supporting approximately 1.8 million housing units.

C. Failed Education Department

It is medically necessary that Education Secretary Miguel Cardona provide students with human trials of essential oil of eucalyptus, lavender and peppermint scented soaps in school restrooms and humidifiers in the coronavirus intensive care unit, classrooms and airspaces to cure any coronavirus allergic rhinitis "Pinocchio nose" contagious state, vaccines are only an estimated 30 percent effective at preventing. The closure of the Arkansas Rehabilitation Center in 2020 demonstrates that Trump Administration federal education spending cuts had real world consequences and reconciliation is complicated by a credible threat of bioterrorism by student loan obsessed alumni. With the Treasurer too plump to account, the President infringed on a good faith effort to settle a divorce with a college fund for descendants, by asking the Education Secretary to look into forgiving all delinquent student

loans while neglecting to terminate delinquent student loan collection attempt rampage shootings or accurately account for student loans and Education Department (ED) spending.

The ED budget has largest margin of error of any Cabinet agency. The ED budget requests fraudulently reduces the total with student loan revenues that must be excluded, when it is not erroneously billing the General Fund for [privately financed federal student lending programs], that must be excluded from the budget total pursuant to the Federal Credit Reform Act of 1990 under 2USC§661a(5)(A)(C). To make matter worse the FY 21 budget shifted to a new accounting software that did not adhere to the generally accepted accounting principles of the prior piecemeal tables and became for all intents and purposes as illegible as her budget cuts. The ED FY 22 budget request must return to using a normal Microsoft Office table organized consistent with ledger used in the historical budget request from FY 19. The annual three year ED budget request needs to consolidate their discretionary, exclude retooled student loan operations in mandatory and advance appropriations tables and explanations into one pdf ED budget document consistent with most other agencies. 3% growth must be ensured despite the COVID-19 pandemic school closures.

To settle his accountant's mother's divorce college fund he is obstructing, at the behest of the same bioterrorist court who detained and intoxicated the accountant with pseudo-ephedrine so Nancy Pelosi could pass the federal budget breaking TCJA, the President is sought to trade his grandiose plan of wholesale forgiveness of delinquent student loans for a five part plan. One, it is nearly time to increase the annual $100 billion lending limit to afford new lending - [$120 billion] now. Two, Stafford student loan limits must grow faster than normalized inflation in college tuition and CEO salaries, to afford room and board again. Three prohibit lenders, the IRS, Attorney General, rampage shooters *et al* from attempting to collect delinquent student loans, contact deinquent borrowers, or impairing their credit of borrowers with the Fair Credit Reporting Act under 15USC§1681a. Four, the normal 11% default risk, that is reported to have increased to 20% during the nerd bashing COVID-19 pandemic, would be dispersed to private lenders with the annual, 4.45% undergraduate and 6% graduate interest rates, without any liability for Pell grants, resulting in more than enough long term profit to afford the default rate. Five, hold university Presidents responsible for hyperinflation in college tuition by investing their excessive compensaton, that is not disbursed as grants, in the long-term sustainability of the student lending program. The reward in heaven is hopefully to dissociate rampage shootings and schools and the real world reward is that lending institution risk sharing of student loans would sustain a profit by strictly interpreting government mandated private lending limit of the Credit Reform Act of 1990 under 2USC§661a(5)(A)(C).

The final ruling of the Trump Administration ED “golf budget” is that total discretionary spending for education was unlawfully cut from $68 billion FY 17 to $63 billion FY 18 before being treated with zero growth to $68 billion by CR 18 and ultimately being compensated for their worries with $70.6 billion FY 18 appropriation, $500 million more than $70.1 billion 3% annual growth. 0.7% FY 19 and 2.3% FY 20 discretionary spending growth is less than 3% and it is important that FY 21 and FY 22 the education budget receives 3% inflation – par is $76.2 billion FY 16 - FY 21. Abusing the number of the beast in the $66.6 billion FY 21 discretionary budget request is a serious crime of genocide. Any incidental spending reductions from school closures be compensated with full funding of 3% growth. Advance Appropriations will inflate 3% annually. Although it is too late to salvage total grants and total mandatory outlays from more than 42 months of persecution by the number of the beast, after three years FY 21 is time for Pell Grants to liberate mandatory programs (Revelation 13:10).

Education Department, Total Outlays FY 17 – FY 22
(millions)

Year	FY 17	FY 18	FY 19	FY 20	FY 21 3%	FY 22
Discretionary Outlays	67,012	69,002	70,860	72,985	75,400	77,662
Total Mandatory Outlays	5,834	6,009	6,189	6,374	7,182	7,397
Total Outlays	72,846	75,011	77,049	79,359	82,582	85,059
Advance Appropriations	(22,444)	(22,597)	(22,597)	(24,624)	(25,343)	(26,103)

Source: Education Department Budget FY 17, FY 18 & F Y19; Gonzalez, Heather B.; Tollestrup, Jessica. Department of Education Funding: Key Concepts and FAQ. Congressional Research Service. April 22, 2016. Advance Appropriations = Undistributed Offsetting Receipts.

The original Department of Education was created in 1867 to collect information on schools and teaching that would help the States establish effective school systems and recreated in the Department of Education Re-organization Act of May 4, 1980. Congress established the Department of Education as a Cabinet level agency in 1980. Its mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access. Today, the Department's early learning, elementary, and secondary education programs annually serve approximately 18,328 school districts and more than 55 million students attending more than 98,000 public and 34,000 private schools. Department programs also provide grant, loan, and work-study assistance to more than 12 million postsecondary students at approximately 6,000 institutions of higher education. At $11,000 per pupil United States has the second highest education spending per capita in the world, but with the highest rate of child poverty in industrialized nations, largest child welfare theft in history 1996-2000, and low estimate on child Census, and hyperinflation in college tuition, Congress must redress threatened cuts to elementary and secondary education budgets, for the last time. 3% growth in education spending is expected. The Office of Elementary and Secondary Education would like for teachers to contribute to disability insurance, in order to receive better than $200 a month benefits when they become disabled and retire early. The most authentic study of the dispute between the President' Budget and Congressional Appropriations regarding the federal education budget is detailed in Education Budget by Major Program 1980-2018.

Nations have an internationally recognized treaty obligation to provide everyone with free elementary and secondary school and progressively free higher education, opposed to hyperinflation. Key programs administered by the Department include Title I of the Elementary and Secondary Education Act (ESEA), for which the Department’s fiscal year 2019 request would provide $15.5 billion to help approximately 25 million students in high-poverty schools make progress toward State academic standards; and $12 billion for the Individuals with Disabilities Education Act Part B Grants to States to

help States and school districts meet the special education needs of 6.9 million students with disabilities. Key programs also include Federal Pell Grants, which would make available $30.2 billion in need-based grants to 7.6 million students enrolled in postsecondary institutions; and the postsecondary student loan programs, which would help provide roughly $151 billion in new and consolidated Direct Loans to help students and families pay for college. CR 18 has redressed most of the President's attempted budget cuts without fully funding the 3% education spending growth rule. To compensate agencies for having to defend themselves against unwarranted budget cuts FY 18 and FY 19 budgets are re-estimated at 3% growth from FY 17. The Secretary's new accounting software does not conform to the ledger and is too low, so it is disregarded and estimates are derived from the FY 19 budget.

Education Department, Discretionary Budget FY 17 – FY 22
(thousands)

	FY 17	CR 18	FY 18 3%	FY 19 President's Budget	FY 19 3%	FY 20 3%	FY 21	FY 22
Elementary and Secondary Education (ESEA)								
Title I Grants to local educational agencies	15,366,180	15,428,437	15,827,165	15,459,802	16,301,980	16,791,040	17,294,771	17,813,614
Opportunity Grants (proposed legislation)	0	0	0	500,000	0	0	0	0
Education innovation and research	100,000	99,320	103,000	180,000	106,000	109,000	112,270	115,638
Supporting Effective Educator Development	65,000	64,559	66,950	0	68,959	71,027	73,158	75,353

(SEED)								
State assessments	369,100	366,593	380,173	369,100	391,578	403,325	415,425	427,888
Student support and academic enrichment grans (Title IV-A)	400,000	397,284	412,000	0	424,360	437,091	450,204	463,710
Supporting effective instruction State grants (Title II)	2,044,411	2,053,287	2,105,743	0	2,168,916	2,233,983	2,301,003	2,370,033
Teacher and school leaders incentive grants	200,0000	198,642	206,000	0	212,000	219,000	226,000	232,000
School leader recruitment and support	14,500	14,402	14,935	0	15,382	15,845	16,320	16,810
Charter schools	342,172	339,848	352,437	500,000	363,010	373,901	385,118	396,672
Magnet schools assistance	97,647	96,984	100,576	97,647	103,594	106,702	109,903	113,200
Promise Neighborhoods	73,254	72,757	75,452	0	77,715	80,047	82,448	84,922
School safety national activities	68,000	67,538	70,040	43,000	72,141	74,305	76,534	78,830

21st century (after school) community learning centers	1,191,673	1,183,580	1,227,423	0	1,264,246	1,302,173	1,341,238	1,381,475
English language acquisition	737,400	732,392	759,522	737,400	782,308	805,777	829,950	854,849
Impact aid	1,328,603	1,319,581	1,368,461	734,557	1,409,515	1,451,800	1,495,354	1,540,215
Other ESEA Programs	1,124,250	1,116,615	1,157,978	763,144	1,192,717	1,228,498	1,265,353	1,303,314
Subtotal ESEA	23,542,190	23,551,819	24,227,855	19,384,650	24,954,421	25,703,514	26,475,049	27,268,523
Special Education (IDEA)								
Grants to States (Part B)	11,939,805	11,984,380	12,297,999	12,002,846	12,666,939	13,046,947	13,438,355	13,841,506
Preschool Grants and Grants for infant and families	826,794	821,179	851,598	826,794	877,146	903,460	930,564	958,480
Other IDEA programs	222,133	220,624	228,797	222,133	235,661	242,731	250,013	257,513
Subtotal, IDEA	12,988,732	13,026,183	13,378,394	13,051,775	13,779,746	14,193,138	14,618,932	15,057,499
Subtotal, ESEA and IDEA	36,530,922	36,578,002	37,606,249	32,436,425	38,522,379	39,677,871	41,093,981	42,326,022
Career and technical	1,119,647	1,122,751	1,153,236	1,137,598	1,187,834	1,223,469	1,260,173	1,297,978

education								
Other P-12 programs	232,911	231,329	239,898	170,328	247,095	254,508	262,143	270,007
Subtotal, Elementary/Secondary Education	37,883,480	37,932,082	38,999,383	33,744,351	39,957,308	41,155,848	42,616,297	43,894,007
Postsecondary Education								
Federal Pell grants (discretionary only)	22,475,352	22,322,722	23,149,613	22,475,352	23,844,101	24,559,424	25,296,207	26,055,093
Other student financial assistance programs	1,722,858	1,711,158	1,774,544	200,000	1,827,780	1,882,614	1,939,092	1,997,265
Consolidated MSI Grant (proposed legislation	0	0	0	147,906	0	0	0	0
TRIO	950,000	943,549	978,500	550,000	1,007,855	1,038,091	1,069,234	1,101,311
Other postsecondary education programs	1,518,551	1,508,237	1,564,108	801,054	1,611,031	1,659,362	1,709,143	1,760,417
Subtotal, Postsecondary Education	26,666,761	26,485,666	27,466,765	24,174,312	28,290,767	29,139,491	30,013,676	30,914,086
Adult Education	595,667	591,622	613,537	499,561	631,943	650,901	670,428	690,541
Research,	187,500	186,227	193,125	187,500	198,919	204,886	211,033	217,364

development and dissemination								
Statistics	109,500	108,756	112,785	112,500	116,169	119,654	123,244	126,941
National Assessment of Education Progress	149,000	108,756	153,470	112,500	158,074	162,816	167,701	172,732
Statewide longitudinal data systems	32,281	32,062	33,249	0	34,247	35,274	36,332	37,422
Departmental management (SSA, Program Admin, OCR, OIG)	2,176,610	2,161,829	2,241,908	2,402,113	2,309,166	2,378,441	2,449,794	2,523,288
Other programs and activities	284,901	282,967	293,488	206,487	302,252	311,319	320,659	330,278
Subtotal, Other Discretionary	2,461,511	2,444,796	2,535,396	2,608,600	2,611,418	2,689,760	2,770,453	2,853,566
Total, Discretionary Appropriation	67,011,752	66,862,544	69,001,544	60,527,263	70,859,493	72,985,099	75,400,426	77,661,659

Source: Education Department FY 19

Most of the Department's 120-plus programs are funded through discretionary appropriation acts enacted each fiscal year. However, there are many education programs—some of them large—that are funded directly through their authorizing statutes. For many budgeting purposes, these programs are classified as mandatory. The Direct Loan program is the largest mandatory program in the Department. The Direct Loan program will make an estimated $115 billion in loans to postsecondary students and their families in fiscal year 2012. However, the appropriation for these loans is not $115

billion. Instead, under the Credit Reform Act, the appropriation is the amount necessary to subsidize the loan volume for the life of the cohort of loans made in the fiscal year, and the subsidy costs are discounted using a net present value calculation. In 2012, these subsidy costs include the Government's cost of obtaining $115 billion, the cost to defray the in-school interest for needy undergraduates, an allowance for defaults, and other factors. These are offset by collections of fees, interest, and principal repayments. In some years, after reflecting the time value of money, or the "reestimate," of prior year loans required by the Credit Reform Act, the estimated receipts exceed the cost of the subsidizing the loans. SA's accounting for its loan and loan guarantees is based on the requirements of the Federal Credit Reform Act of 1990 (FCRA). Under the FCRA, subsidy cost is estimated using the net present value of future cash flows to and from FSA. In accordance with the FCRA, credit programs either estimate a subsidy cost to the government (a "positive" subsidy), breakeven (zero subsidy cost), or estimate a negative subsidy cost. The President's budget is responsible for reflecting on program level and cost. Program level must be presented in brackets, so that it does not add to total outlays. Cost requires indication as to whether or not Congress has decided if cost is to born by program revenues or the General Fund, under §661c. FSA borrows from Treasury to provide funding for credit programs for higher education and subsidies are described as liabilities. FSA claims to have borrowed nearly every penny they lent from the Treasury. However, the doctrine underlying the ED budget request in regards to student loans fails to admit that lending levels authorize the level of lending private banks are allowed to finance and fails to exclude student loan [revenues and outlays] pursuant to the Federal Credit Reform Act of 1990 under 2USC§661a(5)(A)(C).

Education Department, Mandatory Budget FY 17 – FY 22
(thousands)

Mandatory Programs	FY 17	CR 18	FY 18 3%	FY 19	FY 19 3%	FY 20	FY 21	FY 22
Rehabilitative Services								
Vocational rehabilitation State grants								
Grants to States	3,121,054	3,184,849	3,214,686	3,478,238	3,311,126	3,410,460	3,512,774	3,618,157
Grants to Indians	43,000	40,189	44,290	43,752	45,619	46,987	48,397	49,849
Subtotal, Rehabilitative Services	3,164,054	3,225,038	3,258,976	3,521,990	3,356,745	3,457,477	3,561,171	3,668,006
Higher								

Education								
Aid for institutional development	144,305	144,770	148,634	155,000	153,093	157,686	162,417	167,289
Aid for Hispanic-serving institutions	93,100	93,400	95,893	100,000	98,770	101,732	104,784	107,928
Subtotal, Higher Education	237,405	238,170	244,527	255,000	251,863	259,418	267,201	275,217
Other Mandatory Accounts								
Contributions	301	171	310	0	319	329	339	349
Higher education facilities loan accounts	199,397	37,778	0	(1,767)	0	0	0	0
Other Mandatory Accounts, Subtotal	199,698	37,949	310	-1,767	319	329	339	349
Federal Student Aid (FSA)								
Federal Pell grants:								
Mandatory Pell grants	5,680,400	5,977,000	5,850,812	6,103,000	6,026,336	6,207,127	7,000,000	7,210,000
Mandator	[(1,320,0	[(1,382,0	[(1,360,0	[(1,383,0	[(1,400,3	[(1,442,4	[(1,485,6	[(1,530,24

y funding for discretionary program costs	00)]	00)]	00)]	00)]	88)]	00)]	72)]	2)]
Subtotal Pell Grants	[7,000,400]	[7,359,000]	[7,210,812]	[7,486,000]	[7,426,724]	[7,649,527]	[7,879,013]	[8,115,383]
Iraq and Afghanistan Service rants	401	463	413	0	0	0	0	0
TEACH Grants	153,342	74,947	157,942	39,931	162,681	167,561	172,588	177,766
Subtotal, Grants Outlays	5,834,143	6,052,410	6,009,167	6,142,9321	6,189,017	6,374,688	7,172,588	7,387,766
Subtotal, Grants BA	[7,154,143]	[7,434,410]	[7,369,167]	[7,525,931]	[7,589,405]	[7,817,088]	[8,051,601]	[8,293,149]
Student financial assistance debt collection	7,966	8,557	8,557	8,557	8,771	8,990	9,260	9,538
Total Mandatory Outlays	5,834,143	6,052,410	6,009,167	6,142,931	6,189,017	6,374,688	7,181,848	7,397,304
Student Loan Program Level	[100,000,000]	[100,000,000]	[100,000,000]	[100,000,000]	[100,000,000]	[100,000,000]	[100,000,000]	[100,000,000]
New Loans	[87,000,000]	[88,700,000]	[88,700,000]	[90,500,000]	[90,500,000]	[92,300,000]	[95,069,000]	[97,921,000]
Repayments	[67,100,00]	[69,800,000]	[69,800,000]	[72,900,000]	[72,900,000]	[70,713,000]	[70,713,000]	[72,834,390]
Deficit	[-19,900,000]	[-18,900,000]	[-18,900,000]	[-17,600,000]	[-17,600,000]	[-21,587,000]	[-24,356,000]	[-25,086,610]

Source: ED FY 19, Johnson, Wayne; Hurt, Jay. Federal Student Aid FY 17 Annual Report

The Department of Education operates two major student loan programs—the Federal Family Education Loan (FFEL) program and the William D. Ford Federal Direct Loan (Direct Loan) program —but since July 1, 2010, the Department has made new loans only through the Direct Loan program. Outstanding student loan portfolio was $210 billion for FFEL, $63 billion for ECASLA, and $999 billion for Direct Loans FY 18. It is crudely estimated that there are currently $1.5 trillion in outstanding student loans. Stafford Loans are subsidized, low-interest loans based on financial need. The Federal Government pays the interest while the student is in school and during certain grace and deferment periods. The current interest rate for undergraduate loans made in award year 2017–2018 is 4.45%. As of July 1, 2012, only undergraduate students are eligible for subsidized Stafford loans. Unsubsidized Stafford Loans have a fixed interest rate of 4.45% for undergraduate borrowers and 6.00% for graduate and professional borrowers in award year 2017-2018. The Federal Government does not pay interest for the student during in-school, grace, and deferment periods. PLUS Loans are available to parents of dependent undergraduate students, and to graduate and professional students. The interest rate is 7.00% in award year 2017–2018, and the Federal Government does not pay interest during in-school, grace, and deferment periods. Consolidation Loans allow borrowers with multiple student loans who meet certain criteria to combine their loans and extend their repayment schedules. The rate for both FFEL and Direct Consolidation Loans is based on the weighted average of loans consolidated rounded up to the nearest one-eighth of 1%. The resulting rate for the consolidated loan is then fixed for the life of the loan.

A distinction is made between the President's Budget and the Appropriation, respectively, for each year, in the ED Budget by Major Program 1980-2018. For the first two decades Federal Family Education Loans used the majority student loan subsidies, 84% in 1995. It was not until 1999 that the President and Congress agreed the Federal Direct Student Loan Program could produce a $720 million negative subsidy and in 2000 declared a $3.5 billon negative subsidy. In 2001 Federal Family Education produced a negative subsidy of $2.7 billion and Federal Direct Loan Programs $558 million. In 2003 however, Federal Direct Loans needed $4.2 billion and Federal Family Education Loans needed $2.6 billion. Before 1999 Federal Direct Loans had never received more than $822 million in 1995. In 2004 Direct needed $2.5 billion subsidies and Family $5.8 billion. By 2005 Direct only needed $637 million while Family needed $10.9 billion. In 2006, while Direct produced $669 million negative subsidies, the President requested $5.8 billion and $27.8 billion were appropriated for Family Education Loans. Thereafter the negative subsidy dispute spills over into the Other Post-secondary category. Since 2010 Federal Family Education Loans have been discontinued, and after a small investment in 2012 that was lost in negative subsidy appropriation in 2012, the President has never made any requests for Federal Family Education Loan subsidies although Congress has made a number of wild requests. In 2015 Other negative subsidies dried up and Congress led the President to the current accounting practice of General Funds receipts. The pursuit of revenues results in increasingly wildly divergent opinions by the President and Appropriations. According to the historical tables 1980 – 2018 since 2016 the President has proposed not spending any tax-dollars whatsoever, on student loans, but expects revenues to continue, while Congress made large contributions the Education Secretary falsely attributes to the President. Congress has only to look at how many years they financed Federal Family Education Loan Program after new loans through that program were discontinued after 2010, to know they know nothing about student loans.

The cost of higher education in the United States is the second highest in the world, 2.5% of the GDP, even after excluding research funding. 1.5% of GDP higher education spending could be considered normal. Enrollment in higher education in the United States decreased by 7% between 2010 and 2016 (from 18.1 million to 16.9 million students). The National Center for Education Statistics (NCES) projects undergraduate enrollment to increase by 3% (from 16.9 million to 17.4 million students) between 2016 and 2027 without justifying a reversal in trends. After peaking in 2010, enrollment at private for-profit institutions decreased by -47% (from 1.7 million to 915,000 students) between 2010 and 2016. During this period, enrollment at public institutions decreased by -4% (from 13.7 million to 13.1 million students), while enrollment at private nonprofit institutions increased by 6% (from 2.7 million to 2.8 million students). The reason for the decline in higher education enrollment is because that at a maximum of $6,750 annually, for a $27,000 four year degree, Stafford Student Loans, are no longer enough to afford the tuition at highly subsidized public institutions, that are charging an average of $7,380 a year in tuition 2015-2016 up from $6,003 in 2010-2011. Student loans are no longer enough for public institution tuition, but public institutions cost less than either private-for-profit colleges despite a reduction in tuition 2015-2016 or high priced private-non-profit universities. Between 2010–11 and 2015–16, revenues from tuition and fees per full-time-equivalent (FTE) student increased by 23%, 4.6% average annual rate, at public institutions (from $6,003 to $7,380 in constant 2016–17 dollars) and by 7%, 1.4% average annual rate, at private nonprofit institutions (from $20,071 to $21,394). At private for-profit institutions, revenues from tuition and fees per FTE student were -5%, -1% average annual rate, lower in 2015–16 than in 2010–11 ($15,806 vs. $16,698).

Tuition at public institutions must go down to a level below the average $6,750 (2018) Stafford Loan limit, if either federal subsidies or enrollment in higher education, can be expected to increase. To be fair the Stafford student loan limit must increase 3% annually. Revenues per FTE student from government sources were 32% lower in 2015–16 ($783) than in 2010–11 ($1,155) at private for-profit institutions and 14% lower in 2015–16 ($7,600) than in 2010–11 ($8,849) at private nonprofit institutions. At public institutions, revenues per FTE student from government sources were similar in 2015–16 ($14,959) and in 2010–11 ($14,926). For $12,000 + 3% annual growth per capita subsidy from the federal, state and local governments private-for-profit universities could theoretically charge undergraduate students tuition $5,000 a year, that could be afforded with the current $6,750 annual Stafford student loan. Congress must stabilize the education budget by excluding [student loans savings, revenues, collections and mandatory funds used for discretionary programs in brackets] from the President's budget under 2USC§661a(5)(A)(C).

To pay nothing for student loans, the education budget must receive no revenues from student loans. The normal 11% default risk, that is reported to have increased to 20% during the nerd bashing COVID-19 pandemic, would be dispersed to private lenders with the annual, 4.45% undergraduate and 6% graduate interest rates. To prevent inavariable rampage shootings student loans would not be allowed to collect delinquent accounts. To settle his accountants mother's divorce he is obstructing, the President is sought to trade his grandiose plan of wholesale forgiveness of delinquent student loans for a five part plan. One, it is nearly time to increase the annual $100 billion lending limit to afford new lending - [$120 billion] now. Two, Stafford student loan limits must grow faster than normalized inflation in college tuition and CEO salaries, to afford room and board again. Three prohibit lenders, the IRS, Attorney General, rampage shooters *et al* from attempting to collect delinquent student loans, contact deinquent borrowers, or impairing their credit of borrowers with the Fair Credit Reporting Act under 15USC§1681a. Four, the normal 11% default risk, that is reported to have increased to 20%

during the nerd bashing COVID-19 pandemic, would be dispersed to private lenders with the annual, 4.45% undergraduate and 6% graduate interest rates, without any liability for Pell grants, resulting in more than enough long term profit to afford the default rate. Five, hold university Presidents responsible for hyperinflation in college tuition by investing their excessive compensaton, that is not disbursed as grants, in the long-term sustainability of the student lending program. The reward in heaven is hopefully to dissociate rampage shootings and schools and the real world reward is that lending institution risk sharing of student loans would sustain a profit by strictly interpreting government mandated private lending limit of the Credit Reform Act of 1990 under 2USC§661a(5)(A)(C).

Advance Appropriations FY 17 – FY 20
(thousands)

	FY 17	FY 18	FY 19	FY 19	FY 20	FY 21	FY 22
Education for the Disadvantaged							
Title I Grants for Local Educational Agencies							
Basic Grants	1,828,275	1,840,776	2,681,497	1,886,795	1,933,965	1,991,984	2,051,744
Concentration Grants	1,353,050	1,362,301	1,362,301	1,396,359	1,431,268	1,474,206	1,518,432
Targeted Grants	3,793,115	3,819,050	3,819,050	3,914,526	4,012,389	4,112,699	4,236,080
Education finance incentive grants	3,793,115	3,819,050	3,819,050	3,914,526	4,012,389	4,132,761	4,256,744
Total	10,767,55	10,841,177	11,681,898	11,1112,206	11,390,011	11,711,650	12,063,000
School Improvement Programs							
Supporting Effective Instruction	1,670,022	1,681,441	0	1,723,477	1,766,564	1,819,561	1,874,148

State Grants							
Special Education							
IDEA Grants to States	9,220,340	9,283,383	10,124,103	10,377,206	10,636,636	10,955,735	11,284,407
Career, Technical and Adult Education							
Career and technical education States grants	785,628	791,000	791,000	810,775	831,044	855,975	881,655
Total, Advance Appropriations	22,443,545	22,597,001	22,597,001	24,023,664	24,624,255	25,342,921	26,103,210

Source: Education Department FY 19

Advance appropriations are appropriations that become available for obligation in the fiscal year following appropriation. For example advance appropriations for the Department of Education (ED) in the fiscal year 2018 appropriations act become available October 1, 2018, the start of fiscal year 2019. All advances in the Department of Education are appropriated for formula-allocated State grant programs. State grant programs generally allocate funds on July 1, but programs with advance appropriations obligate some of their appropriations on July 1 and the remainder – the advance portion – on October 1, 3 months later. Both portions support programs in the same school year. Advance appropriations are synonymous with undistributed offsetting receipts for the purpose of balancing the federal budget.

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