

Video	Audio
	>>NARRATOR: Below the surface of the earth is a tremendous resource that many of us take advantage of, spring water. We'll explore springs around the state for their beauty, their importance in the environment and we'll even visit some old-fashioned cold-water swimming holes, coming up next.
	>>Narrator: Beneath the surface of the earth lies a tremendous resource that many of us depend on for our very existence, yet often take for granted. This precious resource is ground water.
	People understand surface water much better than they do ground water. Although some areas of the state have experienced problems with quantity and quality of ground water, Georgia has a relatively abundant supply of both surface water and ground water. Fresh surface water includes the water in our streams, rivers, ponds and lakes. The part that lies below the earth's surface in saturated layers of the earth is called ground water.
	When groundwater reaches the surface it is often in the form of a spring. In this program we'll explore some springs and the historic towns that grew up around springs. We'll also explore springs for their beauty, their importance in the environment and we'll even visit some old-fashioned cold-water swimming holes.

	<p>Ground water is not only an essential resource for humans, but many species of fish, reptiles, and even insects make their homes in springs. Just south of Albany, striped bass seek the cool springs of the Florida aquifer that bubble into the Flint River.</p>
	<p>>>Thomas: We're in a unique situation down here in the Flint River basin. Adult striped bass over five kilograms, 10 pounds have an obligate need for cool water. Obviously we are far enough south where during the summer time they have to find cool water. We have these springs which are a constant 68 degrees year round, so come about May each year, when the river temperatures climb up into the 70's, the upper 70's, these adult striped bass will enter these springs and they will stay here most of the summer. Our telemetry studies have shown us that about 150 days of the year they will be closely tied to these springs</p>
	<p>>>Narrator: Biologists from the Georgia Department of Natural Resources utilize this time of year to learn more about the lifecycle of the Striped Bass.</p>
	<p>>>Thomas: This affords us an excellent opportunity to see the bulk of our adult fish; these are long-lived fish that may be in the system of ten or fifteen years. And throughout the year, we've tagged just about every fish we've have caught. Through the years, we have done radio telemetry studies. Through this, what we are trying to do is get a population estimate, that is the number of adult fish in the system, but also the size classes. In other words, following strong or weak year classes as they mature through the system and trying to gage the statues of these striped bass. You're in an area that's extremely complex in terms of hydrogeology, with that close connection between the upper aquifer and the Flint River, so its not just studying adult populations of fish. We also are trying to get involved with finding out more about this ground water.</p>
	<p>>>Narrator: And what they are finding is very interesting. During certain times of the year it is the springs are discharging into the river and at other times of the year it is the river that is recharging the springs.</p>
	<p>There are many species of animals that also make springs and their surroundings home.</p>

	<p>Birds, turtles, frogs, alligators all use spring water for habitat, for sustenance, and for reproduction. One protected spring that is an ideal spot for many of these creatures is Magnolia Springs. Magnolia Springs has been preserved as a State Park and is located about 30 miles north of Statesboro, Georgia. But it turns out that preserving this healthy creature habitat is the happy side effect of preserving human history.</p>
	<p>>>Giles: Magnolia Springs has been a state park since 1938. One of the reasons that it became a state park was because of the historical aspect of it; it was a prison camp during the Civil War. It was the largest prison in the world during the Civil War. It was 42 acres. It was built to replace Andersonville, but it never became that big because General Sherman came through here on his march to the sea and forced it's evacuation. It became a state park in 1938 after a failed effort by the local community to make it a national park. The spring, the last time it was measured, it puts about seven million gallons of fresh water every day, and that's obviously one of the reasons why the prison camp was put here during the Civil War for fresh drinking water. Visitors to our spring will find an interpretive boardwalk, which goes out over the spring itself. We have some descriptive information at the boardwalk telling a little bit about the spring. They'll often see alligators in the water or sunning on the bank; turtles in the water and a lot of different kinds of fish. It's also a good place for bird watching.</p>
	<p>>>Narrator: Spying this endangered woodstork feeding near the springs is a special treat. The Wood Stork is the only stork in North America and it is federally listed as endangered. It is estimated that there are less than 10,000 adult wood storks left. It is the destruction of nesting areas and changes in the use of wetlands that have attributed to this birds' decline. When the storks are foraging for food they place their open bill in the water and systematically move it until it contacts a prey item and snaps its powerful bill closed. This action is one of the</p>

	fastest reflexes in the animal world.
	An aquarium is located across a small footbridge from the boardwalk. On display are examples of fish and reptiles indigenous to the area. This girl scout troop is enjoying a respite from a summer shower while camping at one of the park's campsites
	>>Giles: We have twenty-six campsites, all with water and electric hook-ups. We have three more primitive campsites that do not have electric. We have five cottages; eight to ten miles hiking and biking trails. We have about a one-mile historic trail taking you through the area occupied by Camp Laughton.
	>>Narrator: In the 1940s the water from the spring filled a popular swimming hole for the locals. Evelyn Young of Millen, Georgia remembers.
	>>Young: Well, the first time I ever went to Magnolia Springs I must have been crawling (laughs). I've got fond memories of going, but I've got fond memories of freezing to death too, how cold it was, you know. Now it's so beautiful, they've developed the park, and they've just done a fantastic job with everything that's out there. The cabins, the big lake that's on the other side, it's just a real resort place now with beauty spots, you know.
	>>Narrator: Damming a spring to create a cool water summer swimming hole has always be has always been a rather agreeable idea here in humid Georgia. There is one spring in middle Georgia, just south of Hawkinsville in Pulaski County, that still holds onto an old-fashioned sensibility.
	>>Dunaway: Well, it's basically been here since the beginning of time, and the creek used to flow through this thing up until the early 50s. And it was dug out and a dam put around it, keep the creek from flowing out it and made it into a public swimming pool and that's the way it's been ever since
	>>Dyer: I think Mock Springs is very important to Pulaski County because it's been here for so long. People have been coming here for years and all the older people don't, would never want to see it closed down because they learned to

	<p>swim here, and many people have come to learn how to swim here. It's just a wonderful place to bring your family and come and enjoy. And it's just part of the history that's important to the community.</p>
	<p>>>Narrator: It costs just \$2.50 for admission to Mock Springs and inner tubes cost extra. But most of the fun is still derived by daring jumps into the cold water and taking part in age-old games like king of the dock.</p>
	<p>>>Dunaway: I have one brim right now on the dock that bites you when you go out there. (He laughs) I reckon he calls that his territory, so if you get out and hang your feet off, he'd come up and bite your feet.</p>
	<p>>>Narrator: In the clear water of the springs it's easy to spy the crappie and bass swimming around. You can even see the fish redds. These are nest areas where the fish have carved a saucer shaped bowl in the sand to hold their eggs. You can also see down through the crystal water into the mouth of the spring.</p>
	<p>>>Dunaway: It's about 11 1/2, 12-foot deep at the deepest part it flows roughly about 4,000 gallons a minute.</p>
	<p>>>Narrator: The water coming up from the spring is cold, about 68 degrees, but this doesn't stop many adventurers, especially when the temperature out of the water reaches into three digits as is not uncommon in Georgia.</p>
	<p>>>Dyer: Looking back at all the places I've been all over the United States, I can say that Mock Springs is a wonderful place to come and bring your family and enjoy the nice, cold water. And it's just a nice place to come with all the shade trees and the wonderful clear water.</p>
	<p>>>Narrator: Just up the road from Mock Springs, outside of McRae Georgia in Dodge County, sits Georgia's first swimming pool,</p>

	and it's spring-fed.
	>>Best: It was built in approximately 1907. It's the first public swimming pool in the state of Georgia, and the largest at the time it was built. It's been renovated a few times, but it is the same original pool. The pool is filled with mineral water, spring water from nature. We don't use any chemicals in it. We drain the pool once a week and fill it back and we clean the actual sides and then we fill it full again of natural spring water. It takes approximately twelve hours to fill the pool overnight. My family owns Jay Bird Springs. It's grown into a recreation center through the years. We have a small motel and cottages and an RV park, a skating rink, a snack bar and game room, putt putt golf and volleyball and basketball and softball field. It's a wonderful place for a family reunion. A lot of folks come and stay in our motel and RV Park, and they can basically sit around and watch the children. It's not really spread out, and they enjoy that, the peace and quiet and the country atmosphere.
	>>Narrator: Denise and her brother, DJ, think that it's important to keep Jay Bird Spring like they found it. From its 50's era wooden roller rink to its classic baseball diamond, coming to Jay Bird Springs is like taking step back in time.
	>>Whitsman: Overall theme is the same as you come here years ago. We try to keep everything the same as it, as it was.
	>>Narrator: While the pools and the 350-foot water slide remain the main attraction, people come from all over to drink the water too.
	>>Best: A lot of the people in this area feel like Jay Bird Springs water still has a lot of the healing powers. They say it cures their arthritis when they're here and drinking the water. And, their joints feel better. A lady from Macon comes and feels up a lot of jugs of water, and she has kidney ailment. And the doctors ask her what she's doing, and she says she's drinking Jay Bird water and that's healing her, keeping her healthy.
	>>Female Narrator: Keeping Georgia's groundwater clean is a responsibility of everyone. Here are a few ways you can keep a green garage. Dispose of your used oil filters carefully. Drain thoroughly, wrap a newspaper and place in a plastic bag before tossing. Make your own cleaning solutions from non-hazardous materials such as vinegar, basic soda, borax and ammonia. Finally, keep an absorbent on hand for spills and drips. Cat litter will absorb any wet spill and prevent these contaminants from entering our groundwater. Everyone can play a part in keeping our water pollutant free.

	<p>>>Narrator: Spring water is an important source of drinking water in Georgia. And just about everywhere in the state someone has tried to bottle it and sell it. One such place is in Lithia Springs, about 20 miles west of Atlanta.</p>
	<p>>>James: The first name of Lithia Springs was Dearlick, so named by the Indians. It could have been the Creek Indians. The reason for that name was because the deer would frequent the springs to lick the salty tasting water, which contained lithium, which is a salt, and other minerals in the water. The second name was given to the post office in 1849, is Salt Springs because all, all the activity centered around the water, being unique and healing water. The first analysis, which was done in 1887. The rare bicarbonate of lithium was discovered in the water, and the name of the town was changed to Lithia Springs.</p>
	<p>>>Narrator: The water was first bottled in 1888 and marketed as Bowden Lithia Water. Distributed internationally from offices in New York and New Orleans, water from the springs was shipped around the world.</p>
	<p>>>James: The water ceased to be bottling beginning of World War II and actually was not bottled on any scale after that. I formed a corporation in 1983 and we opened the, ah, reopened the old bottling operation again in early part of 1984. We've been bottling it for twenty years now.</p>
	<p>>>Narrator: Lithia Springs not only gave its name to the town, but it also generated a livelihood for its citizens. This is not unlike many other communities in Georgia. Towns all over Georgia have grown up around a spring or springs. Some towns like Lithia Springs had spas; others bottled their water like Cave Springs south of Rome, but most, like Sandy Springs, just grew up around a spring because of the clean source of drinking water. Georgia's ground water aquifers still</p>

	provide water for almost half of the state's population and about 90 percent of its rural residents.
	>> Vitucci: The name Sandy Springs, which is what our community is named for, it comes from the natural—the five natural springs that actually sprout up on the property here, and it was a natural focal point for water back when the Indians lived in the area, and the early nineteenth century farmers used it also for watering for themselves and for their animals. And the natural springs are still here today and are preserved because of Heritage Sandy Springs. The founders felt that it was so important to preserve these springs that they had the county purchase this land, and that's why it is preserved today.
	>> Narrator: Madison, Georgia, already a community interested in preserving the past, is taking a tip from Sandy Springs. They have identified a historic spring on town property and are taking steps to preserve it.
	>> Everett Royal: We were out trying to figure out what other towns had done with their springs, and really I think there are several that are in process now and people realize that it's really part of the town's history and they're going to try to restore them and we were out trying to figure what other people had done. >> Jane Royal: We moved here from Sandy Springs, and we watched that project evolve. And, um, we wanted to refresh our memory to see what they had done.
	>> Callahan: With the given importance of water now days, here's Georgia struggling with water with Alabama and Florida. It's so important to that water is going to be an important part of our future, but it was also a very important part of our past. And towns formed where there were sources of clear, pure water. And Madison's town founded around the spring area. Um, the oldest area in town is not Main Street. A lot of people like to think of Main Street and the big houses as the original development, but the original homes, the older homes or the smaller more modest dwellings, like the Richter Cottage, one of our local house museums, and they are located on Washington and Jefferson Street. And the spring is right off of Washington Street, so it's interesting to see that it is part of the earliest parts of Madison's history.
	>> Narrator: Perhaps the most famous historic spring in Georgia, and the one that has made the biggest impact on world history, is Warm Springs located about 60 miles south of Atlanta.
	>> Burke: Everything around here is a result of the water. There's a town today that's a thriving tourist town, but it's a result of the warm springs. There's an institute today that's world class in its operations, but it's a result of the warm

	<p>springs. We have a four time elected president of the United States. Never had been done before; never will be done again, and it's a result of the warm springs. It's an interesting place for people around the world to come look at. We get visitors not only from Georgia, Alabama, the south. We get schools that come from all over the United States. People just travel here.</p>
	<p>>>Narrator: The resort town of Warm Springs got its start in 1832 when the first resort was built around the 90-degree springs flowing from Pine Mountain. It was the place for a summer retreat.</p>
	<p>>>Burke: Two moths later, Roosevelt made his first trip down here, and it was on October 3rd 1924 Roosevelt took his first swim in the warm springs. Roosevelt for the first time was able to feel his toes move, for the first time in three years. That right there was a miracle in Roosevelt's life. He attributed to the water, and he said he was making plans to come back in the fallowing spring, April of 1925. By 1926, he was buying the properties around here. He was going to turn it into a resort, a combination resort and a combination health spa for polio patients.</p>
	<p>>>Narrator: The water that Roosevelt found so therapeutic originates on Pine Mountain, seeping downward 3800 feet through several geologic layers, picking up minerals and heating up to around 120 degrees as it travels downward.</p>
	<p>>>Burke: As it travels down towards the center of the earth, it hits this fault line. And when it hits that fault line of rock, it's forced up out of the ground and it's cooling down on itself to where it exits the ground at around 88 degrees. Comes out of the ground at around 900 gallons a minute. Today it's capped over and the water is used and pumped up to the Roosevelt Warm Springs Institute where it is used for therapy in the three pools they have up there. They have a therapy pool, a recreational pool, and an outdoor pool. Today the Warm Springs also feeds the Little White House and all the cottages and schools and dormitories and hospitals on the foundation property.</p>
	<p>>>Narrator: Roosevelt founded the Georgia Warm Springs Foundation in 1927. He believed in the project so thoroughly that he invested nearly two thirds of his fortune in it. Now called the Roosevelt Warm Springs</p>

	Institute for Rehabilitation, it is an internationally recognized rehabilitation facility, providing services for people with many different types of disabilities. But it wasn't Roosevelt who was the first to find the springs therapeutic.
	>>Harmon: The warm springs, a lot of people date the history of this place to Franklin Roosevelt, but our history actually goes back much farther. The warm springs were really first discovered by the Indians, who had a belief that this place had magical healing properties. And it was actually a safe haven for tribes who might be carrying on battles and wars against each other. They could bring warriors here and leave them in the springs until they were better.
	>>Sanford: One reason the water is so great is the water is a lot warmer than like a public pool may be. So when people get in they—the joints are warmed up, the muscles are warmed up so they can have a lot more range of motion than they might have if they were doing land exercises. Also, it's great for relaxation, and wonderful for pain management.
	>>Burke: The water when it comes out of the ground as it picks up all the minerals from the types of rock is one of the chief elements is bicarbonate. And bicarbonate gives you a lifting feeling kind of like if you're in the ocean swimming. Roosevelt noted that he could stand up in three or four feet of water without the use of braces, and he could walk around that type of water. The water held him up. The other elements combined, such as magnesium and sulfur, which is similar to Epson salts-like qualities makes it a very soothing water. If you have paralyzed muscles from polio or other injuries, you can swim in the water and, literally, it will sooth those muscles like your grandmother did when she would soak her feet.
	>>Sanford: You can, you can tell that there are minerals present, especially at the old pool, the Wilson pool because they'll have mineral deposits on the sides, and we have to clean, a lot of times clean those off. And that's not typical of tap water or city water or anything like that.
	>>Narrator: Unfortunately, the public pools are no longer filled with the water of Warm Springs. Age and deterioration of the cement walls make filling the pools on a regular basis structurally unsafe. But visitors still flock to Warm Springs to see not just the empty pools, but also the Little White House Historic Site, the only home that FDR ever owned, and the town of Warm Springs itself,

	with its quaint streets lined with restaurants, hotels and antique stores.
	But the town of Warm Springs owes its present popularity not just to the spring water but also to the dynamic personality of Franklin Delano Roosevelt who spent many holidays here. Some residents and rehabilitation patients still remember him.
	>>Pike: It was a great time when he would come to Warm Springs. The whole town would turn out and get ready for him. A patient looked forward to him coming. He would drive the 38 Ford from the train station, the southern railway, and come back to Georgia Hall. This is the first and last thing he would do to come see the patients. They would gather in a semi-circle out in front of the portico of Georgia Hall and welcome him back. We looked forward to him coming. They put on plays for the president, and we would have a lot of activities here. It was just a great time.
	>>Sanford: A lot of them tell me about, they remember seeing FDR come through or going to his birthday balls or that kind of thing. So it's kind of interesting for me to hear those stories because it's a little piece of history for me.
	>>Narrator: On April 12, 1245, President Roosevelt died in Warm Springs while having his portrait painted at the Little White House. A funeral train brought the President back to Washington from Warm Springs.
	>>Burke: Ten years later to the day, we got the vaccine for polio on April twelfth 1955 due to the March of Dimes, due to Roosevelt coming to Warm Springs, due to the water coming out of the ground.
	>>Narrator: The story of Warm Springs and President Roosevelt is an important tale in Georgia's History books. It's a story of two forces of nature meeting and changing the course of history.