"Someone once asked...how I could work for both Democratic and Republican governors, and I said, 'Well, a forest fire's not a Democratic fire or a Republican fire. It's just a fire."

Maurice Goddard

Early Years

Maurice K. Goddard, born in 1912 in Lowell, Massachusetts to Norman O. and Susan Kimball Goddard, spent his childhood in Pretty Prairie, Kansas where his father served as minister of the Swedenborgian Church. Maurice's mother, homesick for her eastern forests, planted trees all around the house to break up the endless view of flat, open land.

During high school, the family moved to Toronto, Canada, then to Maine, where Maurice earned a B.S. in forestry from the University of Maine in 1935. He taught for several years at Penn State's Mont Alto campus before pursuing a master's degree in forestry from the University of California at Berkeley. In 1940, he married Ethel Mae Catchpole, and they had two sons, Kimball and Mark.

Maurice served in World War II on the staff of General Eisenhower. His service earned him two distinguished awards – the Bronze Star and the Legion of Merit. Following his army stint, he returned in 1946 to Mont Alto to run the forestry school, and then to Penn State's University Park campus to direct the School of Forest Resources, where he remained until 1955.

Mr. Secretary

In January, 1955, Gov. George Leader appointed Maurice secretary of Forests and Waters, a position he held for an unmatched 24 years, through five governors.

When asked about his greatest accomplishments as secretary, Maurice said, "It was my people. I've got the finest staff of any department in this country." At the time he came into office, all the staff employed by his department were political appointees and not necessarily trained foresters. A change was desperately needed to create stability and attract professionals – all 55 graduates of the 1955 class of Penn State's School of Forestry took more secure jobs in

other states. Acquiring civil service status for the positions could establish secure, professional positions. Gov. Leader signed an executive order requiring minimum qualifications for state forestry personnel in October 1956, but it wasn't until 1963, during the Scranton administration, that the law granting civil service protection passed.

Vision for Expansion of State Parks In 1955, there were 45 state parks in Pennsylvania. A number of trends helped fuel Maurice's vision of a park within 25 miles of every citizen – a national movement for parks near cities; better roads statewide; increased automobile ownership; increased leisure time; and demand for outdoor recreation. To address this growing trend, Maurice created the Bureau of State Parks in 1962 to specialize in park management, officially separating park and forestry operations.

Funding the Vision

The problem from the start was how to fund the expansion of parks. Knowing that building more parks would cost money, Maurice went to work to establish dedicated sources of funding:

- Oil and Gas Lease Fund, 1955: revenue from oil and gas leases on state lands dedicated for conservation, recreational development and land acquisition
- Project 70, 1963: a bond issue that raised \$70 million for public lands and facilities. Matching federal dollars for Project 70 came from the federal Land and Water Conservation Fund, established for recreation development in the eastern states. Revenue from offshore oil and gas drilling from the Gulf of Mexico provided \$100 million to Pennsylvania in the 1960s for the development of state and local parks.
- Project 500, 1968: to address additional funding demands,

Project 500 – the Land and Water Conservation Reclamation Act – was passed by Gov. Shafer. This bond issue provided \$500 million for land acquisition, recreational facilities and environmental projects.

By 1970, Pennsylvania had 71 state parks open, 20 more that were under development and 12 that were in final stages of acquisition.

Goddard's Criteria for New Park Locations

(From *Pennsylvania's New State Parks: A Report to the General Assembly on Act 256*)

- Clean bodies of water to serve as the centerpiece of a park
- Reasonably level ground
- Historical or scenic values
- Able to accommodate 25,000 visitors a day
- Near population, because, in the end, the report noted, "parks are for neonle"



Kayakers at Prince Gallitzin State Park

In This Guide	
Fact Sheet	1
Fast Facts	3
Close-Up: Goddard Era Parks	
Close-Up: Tocks Island	
Guiding Questions	7
Activities	9
Links	11



Water, Water Everywhere

Witnessing the heartbreaking effects of the widespread flooding from hurricanes Connie and Diane in 1955, Maurice dedicated himself to managing water as a primary resource for Pennsylvania. He saw water as Pennsylvania's future and floods as our pre-eminent problem. He also connected the opportunity to maintain livability of our metropolitan areas with the same facilities that provided water, flood control and recreation. He felt that multiple-use dams and flood control projects were necessary for the public good.

- Flood control projects during his first four years as secretary, over 400 flood control projects were funded, including stream clearing and flood control construction, such as paved stream channels, flood walls and silting basins. At the time, these were the best solutions available, but Maurice later came to also see the importance of non-structural solutions for stormwater and floodplain management.
- 1961 State Planning Board Growth through Recreational Areas
 Development Plan called for three large federal projects, Tocks Island, Kinzua Dam and Raystown Lake, as well as a ring of parks around the state's 14 metropolitan areas. Much of this development was funded through Project 70.
- Multi-state/agency cooperation around water resources – Maurice was an active member of Incodel and later the Delaware River Basin Commission (DRBC), multi-state commissions working to manage the Delaware River for water supply and control. He became nationally known as a leader in water resource management and was also drawn into one of Pennsylvania's biggest environmental controversies of the 1960s-1970s, Tocks Island.

Changing Environmentalism

For much of Maurice's career, building dams to create lakes for flood control, water supply and recreation was considered part of a sound conservation strategy, but the science around the importance of wetlands and free flowing rivers was starting to change. By the time the Tocks Island dam proposal was finally ready to start, the tide had

turned.

In January, 1971, DER was created to merge the departments of Forests and Waters, Mines and Mineral Industries, and other related areas. Although Maurice opposed the merger, Gov. Shapp appointed him acting secretary, and he was formally appointed in 1975. Maurice's extraordinary public service career through five governors and changing political parties came to an end in 1979 when Gov. Thornburg appointed Cliff Jones to replace him.

Maurice's Legacy

Recognition for Maurice's legacy began long before his retirement. In 1969, Sandy Creek State Park, a park acquired under Project 70 and developed under Project 500, was renamed for Maurice. When announcing the honor, Gov. Shafer said, "Maurice Goddard ranks with Gifford Pinchot as one of America's greatest conservationists."



Sandy Creek State Park was renamed as Maurice K. Goddard State Park in 1969, over Goddard's objections – he disliked personal tributes.

In May, 1978, Penn State announced a proposal to establish the Goddard Chair in the School of Forest Resources for a faculty position to focus on outreach and policy. The position was fully funded by 1982 and first occupied by Art Davis in 1984, who went on to become DER secretary in 1991.

In his retirement, Maurice stayed extremely active as a voice for Pennsylvania's natural resources, serving on the boards of a number of conservation groups. He advocated for establishing a separate agency for parks and forestry; and in 1995, Governor Tom Ridge created the Department of Conservation and Natural Resources.

Maurice died later that same year. Over 300 friends gathered for his memorial service where the minister stated, "Maurice K. Goddard's eulogy has been written. It was his life."

Maurice served an unprecedented and probably never-to-be-repeated 24 years as a cabinet officer. He realized his vision of a park within 25 miles of every Pennsylvanian. He doubled the size of the state park system, adding 45 new parks and 130,000 acres of park land, gaining national recognition for our park system. He established state forest natural and wild areas and professionalized forestry and environmental management in state government. A leader in water resource management, he inspired environmental awareness nationwide.



Cucumber Falls, Ohiopyle State Park



FAST FACTS



BORN in 1912 in Lowell, MA, to Norman and Susan Kimball Goddard. At age 3, the family moves to Pretty Prairie, KS when his father becomes minister of a church.

AGE 12 | 1924 Maurice's family moves to Toronto and then to Portland, ME where Maurice runs track and finishes high school, spending summers with his family at church camp.

AGE 18 | 1931 Starts at University of Maine to study forestry and joins ROTC to help pay for school

AGE 22 | 1935 Hired by Penn State as a forestry instructor at the Mont Alto campus. Takes leave of absence in 1937 to earn masters in forest management from UC Berkeley and returns to Penn State main campus as assistant professor of forestry in 1938.

AGE 29 | 1942 Called to active duty. Serves in the U.S. Army under General Eisenhower and is awarded the Bronze Star, the Legion of Merit and earns the rank of lieutenant colonel

AGE 27 | 1940 marries Ethel Mae Catchpole who he'd met at church camp in 1934.

AGE 31 | 1946 Becomes resident director of Mont Alto Forestry School and then director of the Penn State School of Forest Resources at University Park AGE 43 | 1955 Appointed Secretary of Forests and Waters under Governor George Leader. Sets a goal of a state park within 25 miles of every Pennsylvanian and improves staff professionalism by eliminating political appointments, requiring that staff have proper qualifications

AGE 54 | 1968

Successfully funds millions of dollars of park and conservation projects through Oil and Gas Lease Fund, Project 70 and Project 500

AGE 67 | 1979 Retires from state service after serving under five governors over 24 years, completing 45 new state parks and adding 130,000 acres of state park land.

AGE 63 | 1975 Loses the final vote to build Tocks Island dam in the Delaware River

AGE 56 | 1970 Pennsylvania now has 71 state parks open, 20 more under development and 12 in final stages of acquisition – for a total of 45 new parks and more in development

AGE 83 | 1995 Successfully lobbies for the creation of DCNR, separating parks and forestry operations from environmental regulation AGE 83 | 1995 Maurice dies following a fire in his bedroom; his death is ruled a suicide.



CLOSE-UP: Goddard Era Parks



The Goddard Era

Acquiring parks and open spaces...in and around our urban centers must be regarded as a 'now or never' proposition...[it] simply cannot be postponed until sometime in the remote and hazy future, because land costs in these areas, high as they are now, will be too high for government purchase in another 10 years.

- M. K. Goddard One of Maurice's greatest legacies was the expansion of Pennsylvania's state park system, creating 45 new state parks and setting aside thousands of acres of land as open space for all to enjoy. He believed it took a blend of three components to make a community - functional (homes, stores, factories); cultural (libraries, churches, schools); and recreational - and that he was responsible for the last. In 1957, Pennsylvania's New State Parks: A Report to the General Assembly on Act 256 studied 175 potential sites for new parks. Sites were evaluated based on water, location, topography, subsurface conditions, availability, and scenic and historical significance.

Acquisition began immediately. Maurice believed that "there was little or no substitute for outright public ownership where a clearly defined public need must be satisfied." Eminent domain, the taking of land by government for public benefit, was one of the tools used to acquire new parks, a tool that politically would be much harder to use today. Owners were bought out; Maurice was generally sensitive to those losing their land and in some cases allowed owners to stay in their homes throughout their lifetimes.

Eminent domain is a controversial strategy and met with resistance in some parks, such as Ridley Creek and Marsh Creek. Today's park managers rely more on willing sellers to acquire key parcels of land. But without the use of it during the Goddard Era, it would have been very difficult to achieve the network of parks we enjoy today.

Two Goddard Era Parks



Prince Gallitzin State Park
Cambria County

Maurice closed the gates for the new dam at Prince Gallitzin in December 1960. The 6,600-acre park now includes a large tree-lined 1,640-acre lake with 26 miles of shoreline. People camp, fish, boat, swim, ice skate and ice fish throughout the year. The lake provides flood protection to the communities of Coalport, Irvona and other Susquehanna Basin communities. During one public meeting when a citizen suggested that coal mining would be more economically beneficial, Maurice explained that the project should be an "everlasting economic asset to the community" and that coal mining would be only a temporary benefit. He pointed out that many economically distressed communities in Pennsylvania had relied on a single industry like coal mining, which was eventually exhausted or unmarketable, leaving them stranded.



Gifford Pinchot State Park York County

Gifford Pinchot was the first metropolitan-area park built under Maurice's plan to place parks near heavily populated areas. It contains a small lake surrounded by trails popular for hiking and mountain biking. The diversity of habitats, with lake, marshy shoreline, forests and reverting farm fields draws all kinds of birds. Surrounding farmland was planted in trees to provide a buffer between the park and the highways and houses. The park was named after Gifford Pinchot since it was near the first road paved under Gov. Pinchot's 1925 program to "get the farmers out of the mud."



State parks acquired and/or completed by Maurice Goodard

Allegheny Islands Archbald Pothole Beltzville Canoe Creek Codorus Denton Hill Elk Evansburg Frances Slocum Gifford Pinchot Gouldsboro Hillman Hyner Run Jacobsburg
Kettle Creek
Kings Gap
Kinzua Bridge
Lackawanna
Laurel Mountain
Laurel Ridge
Lehigh Gorge
Little Buffalo
Locust Lake
Lyman Run
Marsh Creek
Maurice K Goddard

McConnells Mill
Memorial Lake
Milton
Moraine
Mt. Pisgah
Nescopeck
Neshaminy
Nockamixon
Nolde Forest
Ohiopyle
Oil Creek
Point
Prince Gallitzin

Prompton
Ridley Creek
Ryerson Station
Salt Springs
Samuel S. Lewis
Shikellamy
Sinnemahoning
Susquehanna
Susquehannock
Swatara
Tuscarora
Tyler
Warriors Path
Yellow Creek



CLOSE-UP: Tocks Island



In 1927, Congress authorized the Army Corps of Engineers (Corps) to survey river basins to determine sites where dams might be useful for flood control, recreation and hydropower. The Corps identified multiple sites along the Delaware River and its tributaries, including a dam along the main branch of the Delaware River at Tocks Island, a small uninhabited island above the Delaware Water Gap in the Minisink Valley. Pennsylvania's Pocono Mountains and New Jersev's Kittatinny Mountains border the valley, providing scenic views and numerous waterfalls. At the time, family farms and small towns were nestled among the valley's vast forests and wetlands. Upon further exploration, the Corps proposed moving the dam to Wallpack Bend, but the funding wasn't there and the dam wasn't essential, so plans were set aside.

The Delaware River was and still is a critical drinking water supply for New York, New Jersey, Pennsylvania and Delaware, including New York City. Conflicts often arose over water use and the allotments given to towns, cities or states. To help resolve conflicts and work together on planning, the governors of the four basin states established the Interstate Commission on the Delaware River Basin (Incodel) in 1936. In 1951, Incodel proposed a plan that included constructing several dams and reservoirs along the Delaware, including Wallpack Bend, the same site recommended earlier by the Corps. Much of the plan was rejected but ultimately the Supreme Court gave Pennsylvania, at the urging of Gov. Leader, the right to build a dam at Wallpack Bend.

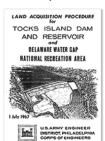
Hurricanes Strike

In August, 1955, hurricanes Connie and Diane hit the eastern United States. Massive flooding in the Minisink Valley and throughout the river basin caused more than 100 deaths and extensive damage. In response, Congress instructed the Corps to re-examine plans for a dam. The Corps determined that the Tocks Island location would result in a larger lake than Wallpack Bend and recommended approval.

In 1961, President Kennedy and the governors of the four river basin states signed the Delaware River Basin Compact to form the Delaware River Basin Commission (DRBC), a regulatory group authorized to plan for and regulate the river basin regardless of political boundaries. This was the first time the federal government and states joined together as partners to help manage a river basin. The DRBC also supported the dam project and after much consideration, Congress approved the Tocks Island dam project in 1962. Original plans set the cost at estimated at \$99-114 million, to be completed in 1975.

The multi-purpose project hinged on the construction of a large earth and rock dam across the main branch of the Delaware River at Tocks Island, creating a large reservoir 37 miles long and a mile wide, providing recreation and water power for an electricity generating plant and drinking water for parts of New York, New Jersey and Pennsylvania. The amount of land needed for this project was extensive and would disrupt many people and destroy thousands of acres of wetlands and forests and historic sites. Local residents were angry and protested the project but many people, including Gov. Leader, Maurice Goddard and the DRBC, still believed that it was essential to prevent flooding and supply drinking water for growing communities and cities in the river basin states. Maurice also favored the project because it would provide millions of people with outdoor recreation opportunities.

The Corps began the long process of acquiring the land needed for the project, involving a combination of federal, state and private purchases. During this time the federal government invoked eminent domain, condemning properties or



forcing owners to sell their land. Entire towns, communities, businesses and family farms were abandoned. More than 3,000 houses were destroyed and high schools, cemeteries, and

utility pipelines relocated. Thousands of people, many with families that had lived there for generations, were displaced.

Although controversy surrounding this project was growing stronger, the project continued. In 1965, the Delaware Gap National Recreation Area was established which included Tocks Island and the surrounding land in the Minisink Valley.

Before all the needed land was purchased, it became apparent that the money allocated for land acquisition wasn't enough. Also, as engineers conducted more in depth studies for the precise siting of the dam, they realized the dam would cost more than anticipated and still might not be effective due to the bedrock. The project estimate grew to about \$198 million. With the country now in the midst of the costly Vietnam War, funding the project became a major issue.

By 1967 the growing controversy surrounding the project could not be ignored. The largest protests centered on Sunfish Pond, a glacial lake located high on the Kittatiny Ridge, formed during the last ice age by the Wisconsin Glacier. Power companies had purchased Sunfish Pond to provide a pumping station for the generating plant. Pilgrimages and protests captured the attention of the nation, including Supreme Court Judge William O. Douglas who joined protestors hiking to the pond. In response to the growing protests,



the DRBC held a hearing to gather information from both sides of the



argument.
Eventually the DRBC and power companies agreed to move the pumping station, and Sunfish Pond was donated

back to New Jersey as part of Worthington State Forest and declared a National Natural Landmark in January 1970.

As the environmental movement, sparked by Rachel Carson's Silent Spring, continued to engage our country, laws passed to protect the environment. In 1970, the National Environmental Policy Act passed requiring environmental impact reviews before major construction projects. The Tocks Island project was put on hold until the impact statement could be completed. Meanwhile more people joined the protest, questioning the need for any dam at all. Throughout all of the protests. Maurice remained firm that the dam was still needed as a reliable water supply for a growing population, as well as for flood control and outdoor recreation. But scientists were gaining a new understanding of the interrelationships of forests, wetlands and water quality and that, in fact, protecting these resources would protect the water quality in the Delaware River Basin. By 1975 the DRBC voted 3-1 against the Tocks Island dam, with Pennsylvania as the lone favorable vote, and the land was given to the National Park Service to manage. In 1978, Congress designated the middle section of the Delaware River a national scenic and recreational river. and Maurice proposed a plan to mitigate the effects of losing the dam, including equitable division of water during a drought and a system of water storage and supply that relied on a number of smaller dams. In 1992, after decades of plans and protests, Congress deauthorized the Tocks Island Dam project.

The Delaware River is one of the last large free-flowing rivers in the United States with no dams or controls on its major channel. A

combination of the costs of the project, the Vietnam War and changing views about conservation defeated the Tocks Island dam project. Although Maurice Goddard lost his fight to build the dam, his goals of flood control, a consistent water source and an outdoor recreation area were still accomplished.

Issues and problems can often be resolved in different ways, especially as new information becomes available and all involved are open to understanding of ecology and water quality and the willingness to look for new sites for electrical generation, the DRBC and protestors came together to save a river. To this day, the National Park Service continues to manage the Delaware Water Gap National Recreation Area and conserve the river, forests and wetlands, and associated wildlife, while sustaining water quality and providing recreation for all people, now and for the future.

discussion. With a better

Why We Need Wetlands

Wetlands are transition zones between dry uplands and openwater. They are often seen along ponds, streams, rivers, lakes, and bays but are also found in low-lying fields, deep in forests or high on mountains. Wetlands are delineated (defined) based on vegetation, soil and hydrology (presence of water). More than 50 percent of the vegetation growing in wetlands must be able to thrive in or tolerate wet conditions, such as cattails, jewelweed and red maples. Soils must be classified as hydric soils or show signs of being water-saturated regularly. The land must be wet all year or part of the year, with the water table at or close to the surface. The many different types of wetlands include swamps, forested wetlands, bogs, wet meadows, shrub wetlands, marshes, and vernal pools. Marshes, with a mix of cattails, grasses and reeds are probably the more commonly recognized, but they make up only 12-14 percent of Pennsylvania's wetlands. Forested wetlands, often overlooked, make up approximately 36 percent of the wetlands found in our state.

Wetlands are critical ecosystems for people and wildlife. They act as sponges that soak up water which is then gradually released into the environment. This reduces the chance of flooding and also allows time for water to percolate into the water table. In addition to acting as flood control and groundwater recharge systems, wetlands act as water treatment plants. Contaminants, such as phosphorous iron and lead can be taken up by reeds, rushes and other plants or become chemically bound to the soil. Vegetation and soil, along with dense mats of decaying matter,

act as sieves to filter out sediments and other pollutants, allowing cleaner water to pass through. Wetlands along coastal areas not only help prevent flooding, but also reduce coastal erosion, saving valuable land from washing into oceans or lakes.

Wetlands provide essential habitat for a variety of wildlife including birds, mammals, reptiles, amphibians, fish and invertebrates. Some animals live their entire lives in wetlands, while many others use wetlands for breeding or as shelter for their young. Many of our state's endangered and threatened birds, such as the sedge wren, king rail, yellow-crowned night heron and least bittern, rely on wetlands to nest and eat. Wetlands also provide recreation for many people who enjoy exploring these diverse ecosystems.

Until the 1970s, wetlands were considered waste lands, either to be filled in and covered or cleared out to form ponds and lakes. In fact, for many years, the federal government even sanctioned and encouraged the draining of wetlands. Now, protection of wetlands is recognized as vital to the health and safety of people and wildlife. Laws such as the Clean Water Act and the Food Safety Act (also called the Swampbuster Act) now help protect wetlands. These laws have helped slow, but have not completely stopped, the loss of wetlands. Education to help more people recognize the importance of wetlands is still needed to continue to conserve these beautiful and essential ecosystems.



Wetland at Black Moshannon State Park



GUIDING QUESTIONS



For teachers with time constraints, the documentary is approximately divided into three parts. Each segment addresses a main idea with guiding questions and answers to aid discussion. The three main ideas presented in the film, *The Life of Maurice Goddard* include:

- A commitment to professionalism and civil service
- A vision for Pennsylvania's state parks and forests that included dedicated funding for natural resource conservation
- A watershed scale approach to water management

Important note for teachers: at 49:52 minutes, the documentary focuses on the end of Maurice Goddard's life, which was by suicide at age 83. How a person who was so loved and had such a tremendous impact could come to such a tragic end is an important topic for discussion, one that requires a thoughtful approach.

Open ended questions to begin discussion:

What was the most surprising thing you learned from the video? How does your life compare to that of Maurice Goddard? What similarities and what differences do you draw between Maurice and yourself? If Maurice Goddard was here today, what questions would you ask him about what he might do differently? What do you see as Maurice's greatest accomplishment? What leadership qualities did Maurice display and how did they help him to achieve his goals?



Part 1 | Professionalism

Minute 0:00-17:39 17:39 minutes total (2 questions)

Why was it important to professionalize park and forest employment in state government? "It was my people – I've got the

"It was my people – I've got the finest staff of any department in this country."

–Maurice Goddard

Many early jobs in Pennsylvania state government were awarded to people who had supported candidates politically, whether or not they had the qualifications for the job. And with each election cycle, many jobs turned over to the new round of political appointees.

Foresters had been trained in Pennsylvania since 1903 when Dr. Joseph Rothrock established the State Forest Academy at Mont Alto. Soon after, in 1907, the Department of Forestry at Penn State's main campus was established, and the two programs merged in 1929. Pennsylvania was turning out a regular supply of trained foresters.

When Maurice became secretary of Forests and Waters in 1955, of the 55 graduates from the Penn State School of Forestry that year, all but one took jobs in surrounding states that offered more attractive and secure positions. The one who remained in Pennsylvania resigned because of the lack of civil service status. Requiring forester qualifications ensured that Maurice was able to hire and keep trained foresters on staff, greatly increasing the professionalism of the agency.

The State Civil Service Commission administers a merit system of jobs, based on knowledge, skills and abilities. Today, 78 percent of state employees are hired through the civil service process and must show through an application and testing process that they have the educational credentials to qualify for the job.

What did professionalism mean for the conservation of our resources?

Forests cover nearly 60 percent of Pennsylvania now, but this was not the case at the start of the 1900s. The unbroken forest of mixed conifers and hardwoods that early settlers discovered was gone except for small, isolated pockets of trees. Repeated forest fires and soil erosion inhibited the forests from recovering.

Prior to Maurice's appointment as secretary, recovery of Pennsylvania's forests from their near destruction had been paramount. By 1950, the focus shifted to providing a sustained supply of timber and other forest products. A goal set in the 1955 state forest management plan was to reach the allowable cut in each district, while still protecting the resource. Maurice accomplished this by hiring staff trained in science-based forest management.

Eventually, planning took on a more holistic ecosystem approach, and an updated plan in 1970 addressed additional issues such as water resources and recreation potential. Pennsylvania's Bureau of Forestry now includes a range of professional staff, including foresters, botanists, ecologists, geologists, biologists, entomologists, forest fire specialists, rangers – all working to conserve Penn's Woods. As a result of the science-based, professional direction initiated by Maurice, forestry staff now:

- Advocate and promote forest conservation
- Manage wildfires
- Protect the forest from destructive insects and diseases
- Conserve native plants
- · Conserve private forest land
- Promote community forests and tree planting
- Manage the certified state forest system
- Protect water quality
- Sustainably harvest timber
- Manage natural gas activity
- Provide recreation opportunities



Part 2 | Vision for State Parks and Natural Resources

Minute 17:40-31:15 and 35:08-39:50 18:17 minutes total (3 questions)

What is a natural resource and what resources do we have in Pennsylvania?

Natural resources exist freely in nature - no human created them. In Pennsylvania, we're blessed with abundant water, forests and significant geologic features. Forests cover more than 17 million acres, almost 60 percent of the state. There are more than 86,000 miles of streams and rivers, more than any other state except Alaska. About one-third of the streams are classified high quality or exceptional value. We share our state with at least 25.000 known native and nonnative species of plants and animals, including 65 species of mammals, from river otters to elk, and around 400 species of birds. Today, about 15 percent of our land is in public ownership, including 121 state parks and 2.2 million acres of state forests.

What was Maurice's vision for state parks and why?

In 1955 when Maurice became secretary of Forests and Waters, there were only 45 state parks in Pennsylvania, primarily in the northcentral part of the state and far from the urban areas where most people lived. A 1950s survey showed only nine percent of people living in Philadelphia used the state parks compared to 85 percent of the residents from the town of Warren in northcentral Pennsylvania.

Maurice drew 25-mile-wide circles on a Pennsylvania map around each of the existing parks, the distance he thought was reasonable to expect people to drive to spend a day in a park to picnic, hike or swim. This visual plan highlighted the lack of parks near the centers of population. When presenting his plan to the legislature, he said, "Parks are for people... Every individual is important, whether he lives in a city or a small town. The goal of this program is a state park within 25 miles of every resident of the Commonwealth."

Water was critical - to Maurice, a

"state park without a place to swim is like apple pie without cheese." Pennsylvania has few natural lakes, and to create a lake as the central attraction in most parks required building a dam.

Once funding was secured, the department narrowed its list of 175 potential sites down to 13. These were under development by 1957, each in a separate county.

What is eminent domain and how do you think it should be used? Eminent domain is the right of a government to take private property for public use, with fair compensation to the property owner. Eminent domain is how states and legal

to the property owner. Eminent domain is how states and local governments build roads, bridges and schools. It can be an effective tool for governments to use to improve communities, but it also can stir up controversy and strong emotions.

It probably would have been impossible for Maurice to expand the park system on the scale that he did without the use of eminent domain. At the same time that Project 70 was enacted, Maurice requested changes to Pennsylvania's eminent domain laws - to require public hearings for each new proposed park and approval of each project by the state planning board and governor. The changes also simplified procedures and increased the kinds of compensation for property owners. Maurice and his staff spent quite a bit of time on the road, meeting with communities and landowners to lav out the vision for each park and the long term benefits to the community. In the first three years of Project 70, the state transferred 163,580 acres into public ownership.

It's hard to imagine eminent domain being used today for park acquisition – most new land purchases now happen with willing sellers or through donations. Today's eminent domain controversies mostly center around energy infrastructure, such as pipelines, and new road construction.

Part 3 | Water Management

Minute 31:16-35:07 and 39:51-54:45
18:31 minutes total
(3 questions)

Why is water management important?

Flood control and water supply are

two critical reasons we need to manage water.

Maurice felt that water was one of Pennsylvania's greatest resources, but also its greatest threat because of flooding, particularly exacerbated by Pennsylvania's many narrow stream valleys. As our population grew, floods took ever more disastrous tolls on life and property, and planning for floods became imperative. Many of the dams built in our state parks, such as Bald Eagle, Kettle Creek and Beltzville, also hold water back during high rain events.

Eighty percent of Pennsylvania residents receive their water from public water systems, and much of that water comes directly from our lakes and rivers, particularly the Susquehanna River. The Delaware River also supplies drinking water for New York (including New York City), New Jersey and Delaware. Millions of people depend on a steady and clean supply of water, especially during periods of drought. Conservation of water and the availability of clean water are key to life.

What was the Tocks Island project and why was it controversial?

See *Close Up: Tocks Island* on pages 5-6 for discussion on this question.

Have environmental ideas changed in the past 40 years?

The Vietnam War protests of the 1960s empowered people to demand a greater voice in government decisions, including the environment. Citizens no longer wanted to rely solely on the voice of professionals, but wanted a say in issues such as land use and air and water pollution. In 1971, Pennsylvania added an amendment to its constitution, stating that the people have a right to clean air, pure water, and to the preservation of the environment.

Ecological science continues to evolve, and there's been a big shift in how we see the value of wetlands in water pollution and flood control. Wetlands act like giant sponges, filtering water and slowly releasing large rain amounts into streams and groundwater. With what we now know, we would not be able to build the lakes that were put into our state parks. It's hard to imagine though what the parks would be without them.



ACTIVITIES



Professionalism



If Trees Could Talk

foresthistory.org/Education/Curriculum Middle school curriculum with activities based on archival materials. Each module compiles primary resources--documents, maps, newspaper articles, oral histories or photographs. Students gather, examine, and analyze information, and synthesize insights.

Key activities:

• A New Profession Takes Seed

10 Minute Leadership Lessons

 $\frac{wvde.state.wv.us/insite/files/Leadership\%}{20Lessons.pdf}$

These lessons are fun, thought-provoking experiences that can lead to stimulating discussions, meaningful insights, and significant learning for students

Additional Suggested Activities

Volunteer. Consider becoming a volunteer in a Pennsylvania state park or forest to conserve your public lands. Visit paparksandforests.org and click on the volunteer link.

Create a timeline for another conservationist (or for yourself!) on what things in their lifetime influenced their conservation ethic or leadership.

Explore Pennsylvania's state parks. Which state park is closest to you? What is its name? Where does its name come from? How many state parks are there today? How many have you visited?

State Parks



palandchoices.org

The Changing Face of Pennsylvania

This lesson looks at how Pennsylvania has changed over the years through maps, aerial photos and data. bit.ly/2h8Er1c

Protecting Land Resources

This lesson looks at Pennsylvania's natural resources and how people impact them, focusing on how proper planning can provide the greatest benefit.

bit.ly/2fbw4fT

No Park is an Island

This lesson provides background information on participating and protecting public lands. The title "No Park is An Island" speaks to the connections between communities, natural resources and public lands. There are no isolated lands or isolated communities. Each should enhance and benefit the other. bit.ly/1WHalA6

Water Management■



Project WET – WOW!
The Wonders of
Wetlands gives K-12
educators tools to
integrate water
education into every
school subject, with
field-tested activities

and assessment strategies. projectwet.org

Key activities:

- · Wetland Habitats
- Wetland Trade Offs
- Wetlands in a Pan
- Soak It Up
- Run Off Race



Rain to Drain - Slow the Flow is an innovative, fun, hands-on stormwater curriculum with experiment style activities to understand the movement of

stormwater in natural and developed communities. extension.psu.edu/natural-resources/water/youth/rain-to-drain

Kev activities:

 Moving Water on Earth/Changing the Water Movement (two parts to one experiment)

Wetlands Protection and Restoration.
United States Environmental
Protection Agency epa.gov/wetlands

- Learn About Wetlands
- The Science of Wetlands
- Wetland Restoration
- Funding for Wetlands

National Geographic: Making Informed Environmental Decisions

nationalgeographic.org/lesson/making-informed-environmental-decisions/



The following sites require that you attend training to obtain their lesson plan materials. The color dots with each activity correspond to the three main discussion topics for the documentary.

- Professionalism
- State Parks
- Water Management



Project Wild offers hands-on K-12 activities designed to support state and national academic standards.

Key activities:

- Planning for People and Wildlife
- Changing Attitudes
- Enviro-Ethics
- Can Do!
- We're in this Together

Science and Civics: Sustaining Wildlife is Project WILD's high school curriculum, designed to serve as a guide for involving students in grades 9-12 in environmental action projects that benefit local wildlife. It involves young people in decisions affecting people, wildlife, and their shared habitat in the community.

- Do You Hear What I Hear?
- Testing the Law: TVA vs. Hill
 ■
- Structure Review

Check the <u>DCNR Calendar of Events</u> (<u>bit.ly/21eBRE9</u>) for upcoming teacher workshops.



<u>Project WET</u> gives K-12 educators tools to integrate water education into every school subject, with field-tested activities and assessment strategies. projectwet.org

Key activities:

- Incredible Journey
- A Snapshot in Time
- High Water History
- 8-4-1, One for All
- Storm Water
- Pass the Jug

Contact the <u>Project WET Coordinator</u> (bit.ly/1PN1s5X) for workshop information, or check the <u>DCNR Calendar of Events</u> (bit.ly/21eBRE9 for upcoming teacher workshops.



Project Wild Aquatic uses the simple, successful format of Project WILD activities and professional training workshops but with an emphasis on aquatic wildlife and aquatic ecology. projectwild.org/aquatic/

Key activities:

- Blue Ribbon Niche
- To Dam or Not to Dam
- Working for Wildlife
- Watershed
- Waterworks
- Wetland Metaphors

Contact the <u>Aquatic Wild Coordinator</u> (bit.ly/1TbKSlk) at the PA Fish and Boat Commission for workshop information, or check the <u>PFBC Calendar of Events</u> (bit.ly/1XV5A2X) for upcoming teacher workshops.



PLT Environmental Education Activity Guide (bit.ly/29Ereli)

Key activities:

- Democracy in Action
- Watch on Wetlands
- Name That Tree
- Field, Forest and Stream
- Forest Consequences
- Who Works in the Forest?

These high school modules are part of Project Learning Tree's secondary environmental education program.

Exploring Environmental Issues: Places We Live

- Green Spaces
- Far Reaching Decision

<u>Exploring Environmental Issues: Focus on</u> Forests

- Words to Live By
- Monitoring Forest Health
- Forest to Faucet
- Who Owns American's Forests?

Contact the <u>PLT Coordinator</u> (bit.ly/1QyM4Ui) at the PA Bureau of Forestry for workshop information, or check the <u>DCNR Calendar of Events</u> (bit.ly/21eBRE9) for upcoming teacher workshops.



Pennsylvania Supplement to Windows on the Wild (PA WOW)

is an educator's guide to exploring Pennsylvania's biodiversity.

Key activities:

- Schoolyard Bioblitz
- The Case of the Endangered Species
- Exploring PA Ecosystems
- Future Worlds



Maurice Goddard LINKS



Links

Delaware River Basin Commission state.nj.us/drbc/

Delaware Water Gap National Recreation Area nps.gov/dewa

Department of Conservation and Natural Resources dcnr.state.pa.us

ExplorePAHistory.com explorepahistory.com

Fedchin, Debra. "Tocks Island & The Delaware Water Gap." Behance. @d_a_f_o_t_o_s, n.d. Web. 04 Dec. 2016. bit.ly/2gP7HJs

Pennsylvania Conservation Heritage Project paconservationheritage.org

Pennsylvania Historical and Museum Commission phmc.pa.gov

Pennsylvania Parks and Forests Foundation paparksandforests.org

Susquehanna River Basin Commission srbc.net/

WITF witf.org

If you liked this video, others are available at Pennsylvania Conservation Heritage Project paconservationheritage.org

References

Maurice Goddard

Cupper, Dan. Our Priceless Heritage: Pennsylvania State Parks, 1893-1993. Pennsylvania: PA Historical and Museum Commission for Dept. of Environmental Resources, Bureau of State Parks, 1993. Print.

Morrison, Ernest, George M. Leader, and William C. Forrey. --a Walk on the Downhill Side of the Log: The Life of Maurice K. Goddard. Mechanicsburg: Pennsylvania Forestry Association, 2000. Print.

Stranahan, Susan Q. *American Heroes - Maurice K Goddard*. National Wildlife Federation, 01 Feb. 1996. Web. 07 Nov. 2016.

Wetlands

A History of Wetlands Protection in the United States. Berkshire Environmental Action Team. December 2, 2016. bit.ly/2g6Ztxe

An Introduction to Wetlands. DEP Fact Sheet. Commonwealth of Pennsylvania, Department of Environmental Protection. December 1, 2016. bit.ly/2qP6CkS

National Park Service. Saved from the Dam. Cultural Resource Management 25.3 (2002): n. pag. Delaware Water Gap. National Park Service. Web. 30 Nov. 2016. https://doi.org/10.100/journal.new.pdf.

Why Are Wetlands Important? Wetlands Protection and Restoration. Environmental Protection Agency. November 29, 2016 bit.ly/2qA3KoZ

WOW: The Wonders of Wetlands. Eckhardt, Brett. and Alab. Kesselheim. Higins Sarah and Mark Schilling. (Eds). Environmental Concerns, St. Michaels, MD and Project WET Foundation, Bozeman, MT. 2008 edition

Video



The Life of Maurice Goddard video.witf.org/video/1640758793/

Pennsylvania Forest History.
Pennsylvania Forest History. WPSU, 15
July 2009. Web. 20 Nov. 2016.
youtu.be/p4ohbPMvaxE

Patrick, Nick. Ghost Waters - Tocks Island Dam - Delaware River. Vimeo. Yeti Nest Films, n.d. Web. 30 Nov. 2016. vimeo.com/142291370.

Tocks Island

Albert, Richard. *Damming the Delaware:* The Rise and Fall of Tocks Island Dam. The Pennsylvania State University Press, 1987

John Fedors, Jr. *Geology Virtual Field Trip: Aerial Photo Interpretation.* Rutgers University. Fall 2004. October 18, 2016. http://bit.ly/2hevvmP

Obiso, Laura. *Delaware Water Gap National Recreation Area*. Arcadia Publishing, 2008

Sandberg, Kathleen. *The History and Demise of the Tocks Island Dam Project: Environmental War or the War in Vietnam.* Thesis. Seton Hall University. 2011. October 12, 2016. http://bit.ly/2h43vGs

Tellefsen, Gale. *Tocks island Dam: An analysis of the Environmental Movement.* Thesis. Lehigh University. 1992. October 18, 2016 http://bit.ly/2heDEMh

Tocks Island Dam Controversy. Delaware Water Gap. National Park Service, n.d. Web. 30 Nov. 2016. bit.ly/2ghFH0A



Quotes from Maurice Goddard Talks

From the Second Pennsylvania Environmental History Symposium,
Penn State University, 4/17/1997.
Maurice K. Goddard: His Life, His Legacy, and Lessons

"The decisions that we make today do not affect only ourselves. If they did, it would not be so hard to make them, as we would be willing to accept the consequences of our own actions."

"But the decisions also affect our children, and their children, and their children in ever increasing numbers, and we must consider them when we act."

"This is why I have devoted my life to conservation as an ethic, as a way of life."

"In a nutshell, the aim or objective of a true conservationist is the stewardship of our natural resources, air, water, and land."

"All of us must make a clear distinction between those corrective environmental actions which are helpful and those blind overreactions which are harmful."

"It means weaving into the fabric of our society an orderly system of making choices that really haven't been made before in all of human history, and of weighing or balancing those choices once made."

"With the emergence of the ecologic ethic, we are beginning to fully examine the relationship of total man to his total environment."

"If you accept the social and political challenge of restoring and improving our environment and making certain that our resources are well managed and judiciously used, then, you must set that objective and strive to attain it."

"Environmental education must work in such a way that people will be able to understand the many facets of the problems they face and base the decisions they make on this understanding."

Prayer read at Maurice Goddard's funeral, one that he often sent to others during times of grief.

When our use of this world is over and we make room for others, may we not leave anything ravished by our greed or spoiled by our ignorance, but may we hand on our common heritage fairer and sweeter through our use of it, undiminished in fertility and joy, that so our bodies may return in peace to the great mother who nourished them and our spirits may round the circle of a perfect life in thee.

- Walter Rauschenbusch For God and the People: Prayers of the Social Awakening

