

Environmental Services department focused on Traditional Ecological Knowledge (TEK)



Woodie Walker

The Rappahannock Tribe's Department of Environmental Services (DES) went operational in November, funded by a capacity-building grant from the Environmental Protection Agency (EPA). The mission of the department is to bring Traditional Ecological Knowledge (TEK) to regional and national conversations about protecting and enhancing natural resources in the Rappahannock homeland. Historically, the Rappahannock people lived along both sides of the lower part of the river that bears their name, generally from the area just below the Fall Line at Fredericksburg to Tappahannock. Today the Tribe's environmental department is focused on protecting natural resources, and cultural resources, in roughly that same area. For example, the area known as Fones Cliffs has been threatened in recent years from commercial and residential development. Your DES is working with local, state, and national agencies to address concerns raised by these projects. Other areas of concern include the impact of climate change on the Rappahannock watershed. As sea levels rise and tides change, there will be impact to

marshes, streams and associated plants and wildlife. The department is also consulting with conservation agencies about land owned by the Tribe, identifying unique ecosystems and the possible presence of species of concern. This data will inform the Tribe in developing its land in the future, for projects like growing medicinal plants.

Traditional Ecological Knowledge (TEK) is a trendy way of labeling the way Indian communities understand their homeland. TEK is built on the experiences Indian communities have with the natural world. An important aspect of TEK are the memories Native families have passed along to each other about the forests, streams, plants and wildlife in their homeland. An example is the recent decline of herring in Rappahannock River tributaries. Herring were once a staple food commodity for communities in this region. Today herring numbers have plummeted so low that harvesting these fish is illegal in many places where people used to net by them by the bushel for salting and preserving. The DES wants to learn what the Rappahannock community knows about these and similar issues.



Blueback and Alewife river herring were a plentiful and relied-upon food source until recently. Overharvesting and habitat degradation has decreased their populations in the Chesapeake Bay watershed such that possession of these fish is now illegal. For more see <https://dwr.virginia.gov/fishing/regulations/river-herring-possession/>

To inform your DES about Rappahannock TEK, the department is initiating a committee of Tribal members to advise the director about this community's priority concerns, goals, and plans for the future. The DES is the conduit from the Tribal community to government agencies and non-profit groups who share your concerns. It needs Tribal input to be successful.

An important avenue for these kinds of discussions is a new EPA Regional Tribal Operations Committee (RTOC), which held its inaugural meeting in December. It includes representatives from each of Virginia's federally-recognized tribes. Assistant Chief Mark

Two-Eyed Seeing: an Indigenous Approach to Natural Resource Conservation

An article in the July/August 2020 issue of *The Wildlife Professional* explained "two-eyed seeing" as the marriage of Indigenous knowledge, also known as Traditional Ecological Knowledge (TEK), and Western Science. "If we can learn to see through two lenses, or with two eyes, we will better understand the world, ecology, or environmental science in general," said Jesse Popp, a scientist and member of the Wiikwemkoong Unceded Territory in Canada. In one example, the Heiltsuk in British Columbia shared traditional knowledge about grizzly bears with scientists, and set snares to gather grizzly hair for DNA analysis. Their work confirmed tribal knowledge about the extent of the grizzly's range, resulting in a better-informed plan for managing bear habitat and improved communication between the Heiltsuk and the scientists.

Fortune is the Rappahannock Tribe's primary RTOC representative. At its first meeting, Chief Dana Adkins of the Chickahominy Indian Tribe was elected RTOC chairperson, and Jessica Phillips, tribal member and environmental officer for the Chickahominy Indians Eastern Division, was elected vice chairperson. The RTOC will meet this spring to help tribes develop an EPA-Tribal Environmental Plan (ETEP). The driving force behind this partnership is the 2018 federal recognition of the tribes. Federal law mandates that the Virginia tribes be consulted with on environmental issues on a government-to-government basis. This is an exciting time to be involved in natural resource protection and your DES will work to make the Rappahannock Tribe a leader in these efforts.

This spring DES Director Woodie Walker will organize a series of forums engaging Rappahannock leaders with conservation agencies and non-profits. The goal is to connect these agencies to the Rappahannock community, and introduce Rappahannock TEK into ongoing efforts to protect our natural resources on the Middle Peninsula and Northern Neck, and in the Chesapeake Bay. If you are interested in advising the DES, please contact Woodie Walker, wwalker@rappahannocktribe.org or (804) 769-0260 x. 107.