

Exelon Generation Panel Discussion with STAC

September 2021



Exelon Generation®

Executive Summary

Background

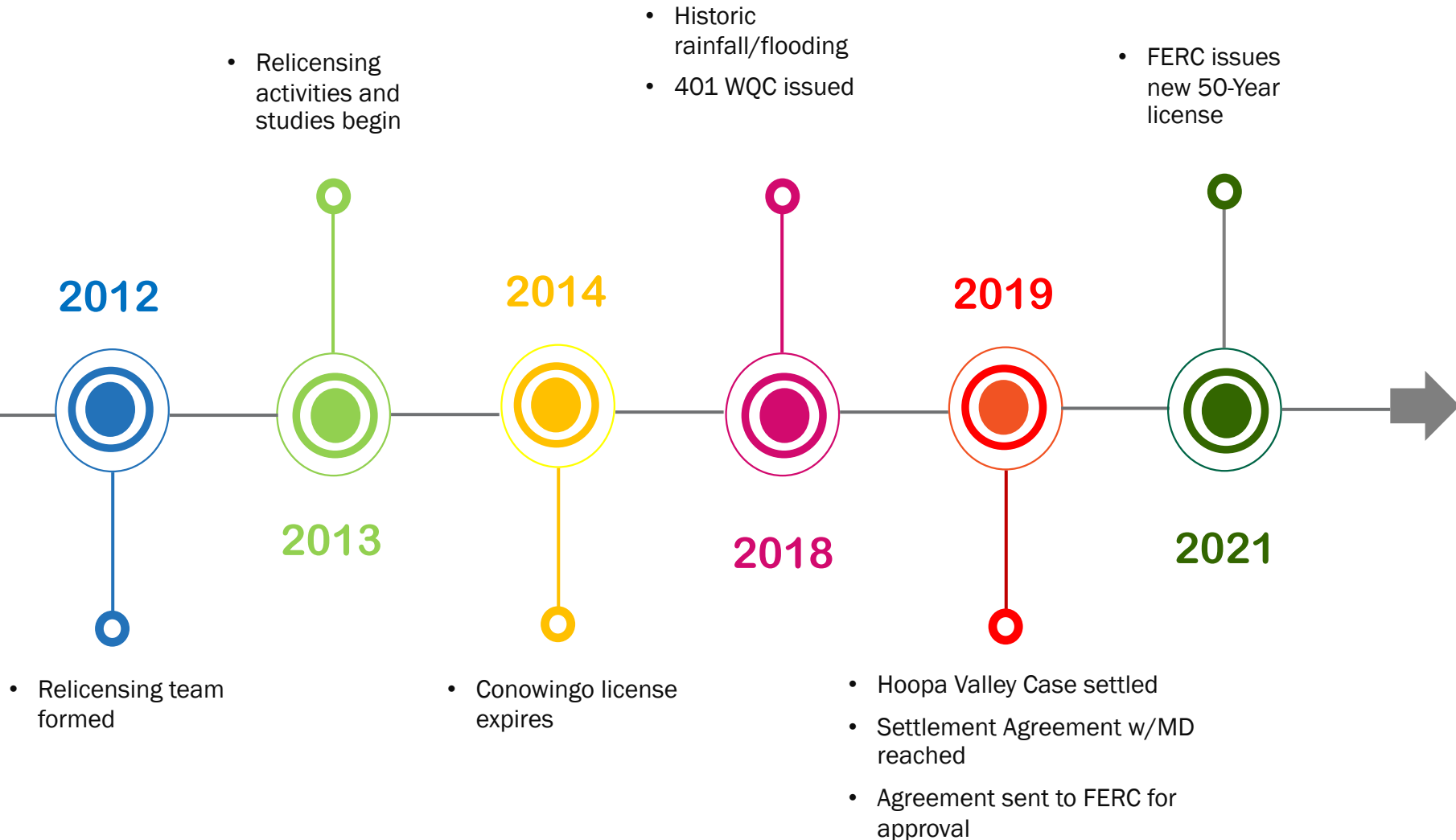
In March 2021, FERC renewed the Conowingo Dam's 50-year operating license, preserving Maryland's largest source of renewable energy and enabling Generation to move forward with up to \$700 million over 50-years in planned investments to enhance aquatic life, water quality and environmental stewardship.

At the same time, we continue to see misinformation being published that, at times, is in direct opposition of what the scientific studies has shown regarding the Conowingo Dam and impacts to the Chesapeake Bay.

For example, some have characterized sediment as being the *single greatest risk* to the Chesapeake Bay despite scientific evidence that has shown nutrients are the greatest risk to Bay health.

We are interested in understanding what role we can play to support the scientific community on efforts to distill and provide study data in a digestible and easy to understand format for public consumption.

Conowingo Dam Relicensing Timeline



A New Era For Conowingo Dam And The Chesapeake Bay

- The new license incorporates the terms of the settlement agreement that was reached in October 2019 between Exelon Generation and the State of Maryland regarding the Conowingo Dam and Hydroelectric Project and paves the way for up to \$700 million in planned investments by Exelon Generation.
- Investments will enhance aquatic life, water quality and environmental stewardship in the Chesapeake Bay watershed.
 - ~\$225 million - settlement agreement between Exelon and the State of Maryland on programs, projects and support for restoration and protection of the Chesapeake Bay, enhanced debris management and enhanced fish and eel passage improvements.
 - Up to \$300 million – settlement agreement between Exelon and the USFWS on fish passage improvements including a new trap and transport program.
 - ~\$175 million – recreation site enhancements and wildlife program support for rare, threatened, and endangered species.

Managing Public Perception – Myth vs Fact

“...sediment now poses the biggest threat to the Bay when extreme storms scour this sediment and transport it into the Bay, smothering subaquatic vegetation, causing massive dead zones, and killing fish.”

August 9, 2021

“While the dam may have slowed the flow of some sediment for a time, the dam now releases it in catastrophic unnatural high-impact releases.”

June 28, 2021

Managing Public Perception – Myth vs Fact

“Since the reservoir is at capacity, it doesn’t take much flow for the Mighty Susquehanna to scour enormous amounts of nutrients and sediments from behind the dam that it sends downstream.”

August 9, 2021

“This dam is now a loaded cannon which fires frequent sediment shots straight to the nation’s largest estuary.”

August 9, 2021

2015 LSRWA Study Key Findings

- The reservoirs behind the Holtwood, Safe Harbor, and Conowingo dams no longer have the long-term ability to store sediment and associated nutrients: a state of dynamic equilibrium now exists.
- The majority of the sediment load from the lower Susquehanna River entering the Chesapeake Bay during storm events originates from the watershed rather than from scour from the reservoirs.
- Nutrients, not sediment, have the Greatest Impact on Bay Aquatic Life.
- While increasing or recovering storage volume of reservoirs via dredging or other methods is possible, the report concluded that the Chesapeake Bay ecosystem benefits are minimal and short-lived, and the costs are high.
- Management opportunities in the Chesapeake Bay watershed to reduce nutrient delivery are likely to be more effective than sediment reduction opportunities at reducing impacts to the Chesapeake Bay water quality and aquatic life

2019 UMCES Study Key Findings

- The potential impact of reservoir sediments to Bay water quality are limited due to the low reactivity of scoured material, which decreases the impact of total nutrient loading even in extreme storms.
- Scientists found that most sediment and particulate nutrient impacts to the Bay occur during high-flow events, such as during major storms, which occur less than 10% of the time.
- While large events can have significant short-term impacts, the Bay is resilient over the long run due to ongoing restoration and time gaps between events.
- Major storm events can deliver enormous amounts of sediment to the Bay, but they occur infrequently (less than 10% of the days since 1978). Sediment delivery to the mid-Bay region, where waters are saltier and more conducive to nutrient releases from sediment, is relatively small in magnitude, minimizing potential impacts to Bay water quality.

Discussion Starters

- There is a disconnect between perception and scientific study data as it relates to threats to Bay health – how can Exelon support STAC to educate the public on the science?
- How do we curb the misinformation and mischaracterizations of issues like sediment and nutrients?
- Is there an opportunity for Exelon and the STAC to work together to bring the scientific evidence more to the forefront of the conversation around Conowingo Dam?
- Is the STAC in a position to distill the scientific data into terms that the general public could consume and understand? (i.e., whitepapers, study summaries, social media posts, other collaborations?)

Thank you