



The Asplund Permit Story

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John M. Asplund Wastewater Pollution Control Facility (WPCF)

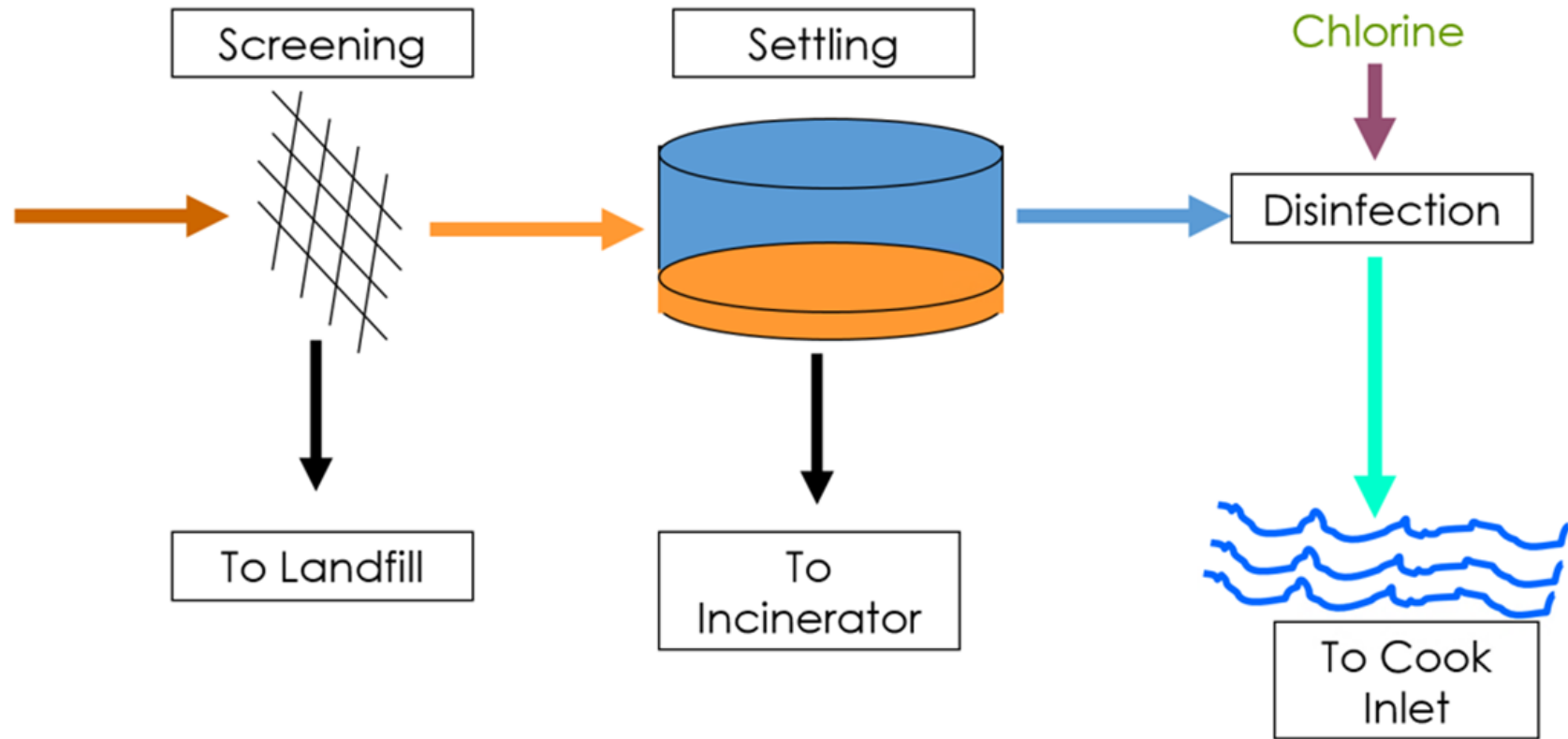


- Largest in Alaska
- Began Operations in 1972
- Capacity of 58 MGD
- Provides Primary Treatment per EPA § 301(h) permit
 - Screening
 - Grit Removal
 - Settling/Clarification
 - Disinfection
- Discharge is quickly dispersed by Cook Inlet's extreme high tides
- Major upgrades in 1982 (process improvements), 1989 (solids handling)
- Continually upgraded since, e.g.
 - Screen replacements
 - Clarifier upgrades
 - New Disinfection system
 - New Electrical system and Plant-wide Controls



Asplund Primary Treatment Process Removes Over 75% of the Incoming Solids from Wastewater

Asplund Treatment Process Overview



AWWU is proud of our role in protecting public health and the environment



What is § 301(h) of the Clean Water Act (CWA)?

- Federal Statute provides for a variance from the standard secondary treatment requirement for discharge to a marine environment
- Statute calls out criteria for eligibility for the permit variance, including:
 - AWWU must operate plant to meet primary treatment standards
 - Discharge to environment does not degrade waters
 - Monitoring is done to ensure no degradation
 - Potentially toxic pollutant are controlled through an Industrial Pretreatment Program.
- Utility's performance and results are monitored by Federal and State authorities and subject to their renewal specified in law

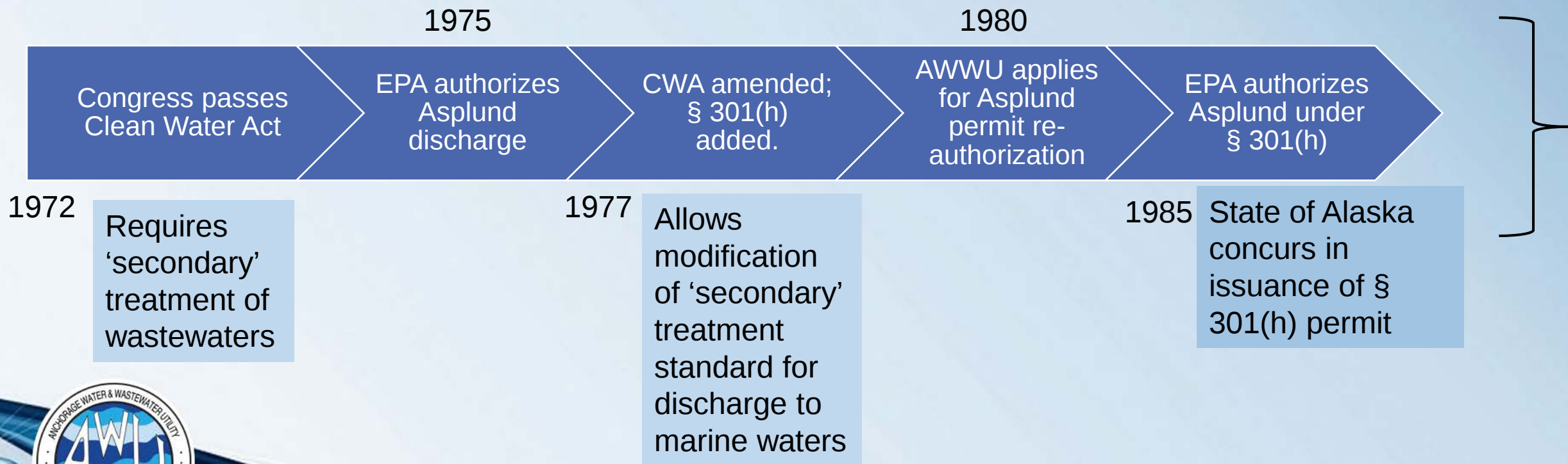


§ 301(h) of the CWA recognizes that marine discharges are different

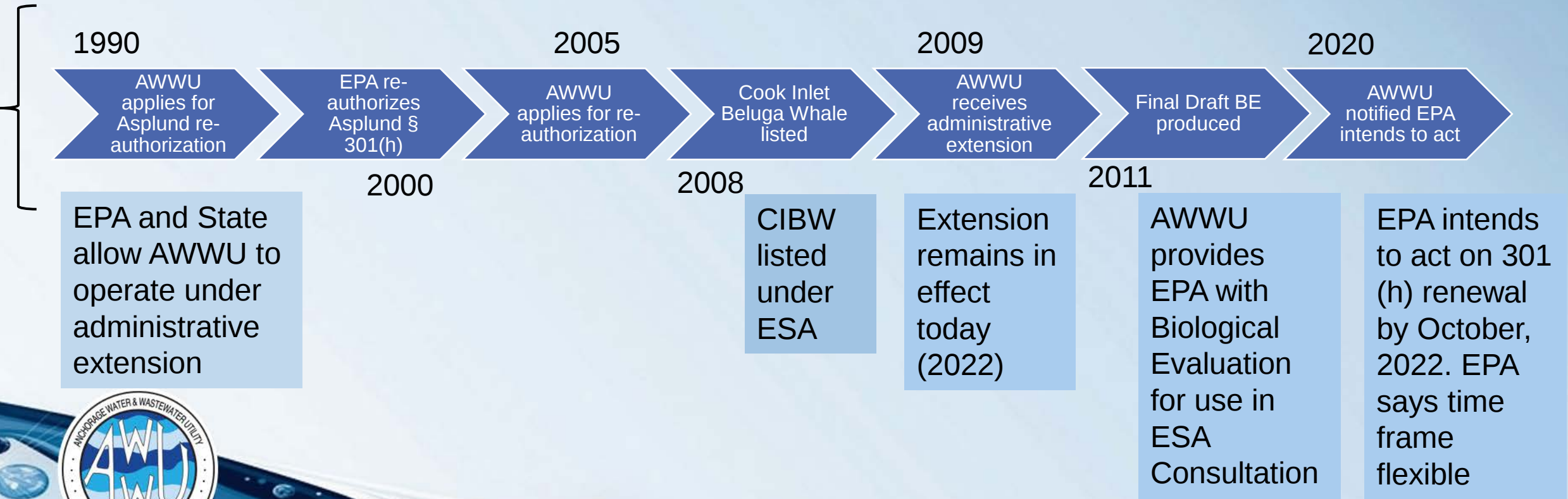
- ~ 28 MGD discharged to Cook Inlet at Point Woronzof
- All flow gets screening, primary treatment and disinfection
- Permitted by USEPA since 1985; re-authorized in 2000.



§ 301(h) Historic Timeline for Asplund WPCF



§ 301(h) Historic Timeline for Asplund WPCF - continued



ADEC and EPA have linked authority for permitting

- Clean Water Act §401 calls for State to certify that a discharge permit would not abrogate State Water Quality Criteria
- State has authority to establish a “Mixing Zone” where a variance in State Water Quality Criteria may apply.
- State has option to not engage in the § 401 certification process, as was done in the 2000 permit
- AWWU believes that having ADEC engage in the § 401 certification process is critical to a successful reapplication process, we urge the State to engage in the § 401 certification process



> 36 years of monitoring shows no adverse effects:



- Plant meets all permit conditions.
 - Effluent yields very low levels of trace contaminants.
 - Background trace metals from glacial silt.
 - No measurable Water Quality effects.
 - No toxicity in effluent bioassays.
 - No bioaccumulation of toxic materials.
 - No sediment effects at outfall.
 - No sediment contamination from outfall.
 - Comprehensive biological evaluation showed no adverse effect on Beluga Whales.
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- Please visit results posted on AWWU Website at:

<https://www.awwu.biz/water-quality/cook-inlet-water-quality>



AWWU maintains Asplund WPCF to National award-winning standards

Project

Year

- New Influent Screening system 2001
- Upgrade Solids Incinerator 2006
- New Plant-wide control system 2008
- New Electrical System 2009
- Upgrade Clarifiers 2010-2017
- New Disinfection system 2014-2016



New Asplund Disinfection System

NACWA	National Association of Clean Water Agencies
Platinum Peak Performance Award	5 years with no permit violations
Gold Peak Performance Award	No permit violations in calendar year
Silver Peak Performance Award	No more than 5 permit violations in calendar year

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
ASPLUND Wastewater Treatment	Platinum	Gold	Gold	Gold	Gold	Silver	Platinum	Gold	Gold	Gold	Gold	Silver	Silver	Silver	Silver	Silver	Silver	Silver



In Summary:

- AWWU recognizes unique environment we live in.
- AWWU is dedicated to protecting our environment.
- AWWU meets the intent of the CWA.
- AWWU plant works! 36years of monitoring has shown no impacts.
- AWWU invests for continuous improvement.
- AWWU works in the public interest.



What happens if Anchorage is denied renewal of its § 301(h) variance request ?

- Asplund WPCF would have to be upgraded to secondary treatment, at a minimum.
- Most likely State and federal agencies would establish a compliance schedule to make improvements under a State permit, with EPA oversight.
- It could take 10 years +/- to plan, design and construct an upgrade to the plant.



What are financial consequences of losing the § 301(h) variance ?

- Cost of going secondary treatment estimated to be \$1.0 – 1.4 Billion (2022 dollars)
- O&M costs would increase about \$4,400,000 per year
- There are no known federal programs for direct grant participation
- The State does not have a financial program other than the SRF (as amended by the IIJA) and is not presently in position to address a need this large



AWWU ratepayers would bear the cost of required plant upgrades

- AWWU customers would see rate increases to provide ...
 - \$1.2 Billion $\pm$ for capital upgrades
 - Annual increase in O&M expenses of \$4,400,000
- Meaning
 - A rate increase of 235%
 - An increase in Single Family Home rates
 - From: \$53.91 per month
 - To: \$180.00 per month



In closing:

If EPA does NOT reauthorize the Asplund § 301(h) permit:

- Higher treatment thresholds are not likely to result in a discernible increase in protection of Public Health and the environment.
- Anchorage utility customers would be saddled with \$1.0 to \$1.4 B in unnecessary capital improvements.
- Anchorage and the State of Alaska would suffer negative impact to families, businesses, and statewide economy.



Clearly, it is in the best interest of the State of Alaska to use its authorities to work for the §301(h) variance in Clean Water Act permitting for the Asplund WPCF.





Thank you

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