#### **Alaska State Wetland Program Summary**



Photo Credit: Brian Johnson

# Click Here to Skip to Alaska Information about Wetland:

Regulation

**Monitoring and Assessment** 

Water Quality Standards

Voluntary Restoration

**Education and Outreach** 

**Integration with Other Programs** 

# Section A. Quick View

#### **Description of State's Wetlands**

Freshwater Alaskan wetlands include bogs, fens, tundra, marshes, and meadows; brackish and saltwater wetlands include flats, beaches, rocky shores, and salt marshes. Most of the State's freshwater wetlands are peatlands (wetlands that have organic soils), and cover as many as 100 million acres. Alaska's coastal wetlands are cooperatively protected and managed by local governments, rural regions, and the State.

# **State Definition of Wetlands**

The Alaska Department of Natural Resources (ADNR) Office of Project Managing and Permitting defines freshwater wetlands in its regulations as "environments characterized by rooted vegetation that is partially submerged either continuously or periodically by surface freshwater with less than 0.5 parts per thousand salt content and not exceeding three meters in depth." Saltwater wetlands are defined as "coastal areas along sheltered shorelines characterized by halophilic hydrophytes and macro algae extending from extreme low tide to an area above extreme high tide that is influenced by sea spray or tidally induced water table changes." This definition is comparable to the Section 404 definition except that it goes beyond the Section 404 definition in regulating vegetated areas to a depth of three meters.

# **Historic Wetland Loss/Gain\***

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
170,200,000	170,000,000	200,000	0.10%

Source: U.S. Fish and Wildlife Study (Dahl, 1984).

<sup>\*</sup>Additionally, the state of Alaska published a study in 1994 entitled, "Status of Alaska Wetlands" by Hall et al, funded by the Fish and Wildlife Services that included a mapping effort. To review this report, click <a href="http://www.fws.gov/wetlands/Documents/Status-of-Alaska-Wetlands.pdf">here</a>. (<a href="http://www.fws.gov/wetlands/Documents/Status-of-Alaska-Wetlands.pdf">http://www.fws.gov/wetlands/Documents/Status-of-Alaska-Wetlands.pdf</a>).

# **Primary State Wetlands Webpage**

Alaska Department of Environmental Conservation – Alaska's Wetlands Webpage

http://dec.alaska.gov/Water/wwdp/wetlands/index.htm

# **State Wetland Program Plan**

Alaska does not currently have a state wetland program plan. However, the Alaska Department of Environmental Conservation is in the process of developing a plan (for more information about their process, please reference: <a href="http://dec.alaska.gov/Water/wetlands404/docs/Basic\_WPP\_ppt.pdf">http://dec.alaska.gov/Water/wetlands404/docs/Basic\_WPP\_ppt.pdf</a>).

# No Net Loss/Net Gain Goal

Alaska is implementing President Bush's August 1991 policy.

# State Budget and Staffing for Wetland Work

State Name	Core element #1: Regulation	Core Element #2: Monitoring and Assessment	Core Element #3: Wetland Water Quality Standards	Core Element #4: Voluntary Wetland Restoration
Agency	ADEC	ADEC	None	None
Source	General Fund	General Fund		
Amount	Not available	Not available		
FTE	1 FTE	0.25 FTE		
Agency	Dept. of Law	Fish and Game		
Source	General Fund	General Fund		
Amount	Not available	Not available		
FTE	1 FTE	0.25 FTE		
Agency		Natural Resources		
Source		Unknown		
Amount		Not available		
FTE		0.25 FTE		
Agency		Transportation		
Source		Not Available		
Amount		Not available		
FTE		0.25 FTE		

**Detail:** The State of Alaska has had a recent sharp decline in budget funds, due to the decline in the price of oil. Staffing for the wetland program has been reduced.

Funding Source	Federal	State	Local
Percent of Total Budget	75%	25%	0%

#### **State Permitting Fees**

State Permitting Fee	State Name
Yes/No	YES
Amount (range)	\$200-\$2,300
Agency	Department of Environmental Conservation

#### **Innovative Features**

None.

#### **Models and Templates**

None.

#### **Section B. Regulation**

#### How are Wetlands Regulated in Alaska?

Alaska uses §401 water quality certification as its primary mechanism to regulate wetlands at the state level. ADEC certifies Section 404 the Corps Dredge and Fill Permits, using the Alaska Water Quality Standards. The state has regulatory standards for activities in both freshwater and coastal wetlands in the coastal zone. The Alaska Department of Environmental Conservation (ADEC) is the lead agency for managing wetlands in Alaska. Many activities in freshwater wetlands are under federal or state jurisdiction because they are on state or federal lands or are regulated pursuant to other statutes such as the Habitat Protection Program and the Forestry Practices Act. Currently, only Anchorage and Juno are actively engaged in wetland regulation.

State statutes that protect and manage wetlands in Alaska include:

- Habitat Protection Program. Alas. Stat. s. 16.05.874-871 et. seq. The state requires the Alaska Department of Fish and Game (ADF&G)'s Division of Habitat to identify "various rivers, lakes, and streams or parts of them that are important for the spawning, rearing, or migration of anadromous fish. Permits are required for projects which would influence other critical fish habitat. Any activity that may impact this anadromous fish habitat, such as a hydraulic project, diversion, or change to the flow or bed of the river, lake, or stream, must be approved and permitted by the department. Anadromous fish habitat may include some types of wetlands such as sloughs and backwater wetlands, and projects in these wetlands will require a Fish Habitat Permit (less than 10% of issued permits).
- Alaska Land Act: Alas. Stat., s. 38.05.070-075. Wetlands on public lands are also regulated.

#### **Wetland Delineation**

<b>Delineation Guidance</b>	Yes	No	Detail
Use State's Own Method		Χ	
Use Corps' 87 Manual and	Х		
Regional Supplement			
Other (Please describe)		Χ	

**Detail:** In Alaska, the U.S. Army Corps of Engineers (Corps) may conduct delineations or will enter into contracts for delineations to be carried out by a Corps-approved consultant. The 2006 regionalization of the Corps' 1987 *Wetlands Delineation Manual* in Alaska was the first in the country.

#### **Evaluation Methodology**

The hydrogeomorphic (HGM) assessment approach for wetlands is presented in three regional functional wetland assessment guidebooks for understanding Alaska wetlands and assessing wetland impacts and functions (<a href="https://dec.alaska.gov/water/wnpspc/wetlands/southeastcentralhgm.pdf">https://dec.alaska.gov/water/wnpspc/wetlands/southeastcentralhgm.pdf</a>). The hydrogeomorphic approach is a rapid assessment tool specifically developed for the dominant type of wetlands in three regions of the state: Interior, Southcentral and Southeast Alaska. These guidebooks provide methods and resources for assessing the wetland functions for planning, permitting and mitigation. These were cooperatively developed by 23 state and federal agencies and organizations. Additionally, Juno uses a rapid functional assessment tool.

#### **Exempted Activities**

Comparable to federal exemptions.

# **Special Provisions for Agriculture and Forestry**

An amended Forestry Practices Act was adopted in 1990. Forest practices regulations were adopted in 1992.

#### **Penalties and Enforcement**

Enforcement actions under the state's water quality laws apply but are not specific to wetlands. Violations of state water quality laws may result in civil penalties of no less than \$500 and no more than \$100,000 for the initial violation and no more than \$5,000 per day the violation continues. Alaska's superior court may issue injunctions. Any person in violation of water quality laws also will be responsible for any damages to fish, wildlife, and vegetation. Finally, criminal penalties may be issued for violating these lawsState penalties do not compare with federal law.

#### **Permit Tracking**

The ADEC has a formal system for tracking §401 certifications which is available online through Alaska Water Permit Search tool on the ADEC website at <a href="http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx">http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx</a>.

# State General Permit (statewide vs. regional coverage)

Permit Coverage	Yes	No	Detail (Type of Permit)	
Regional General Permit	Х		General permits have been issued for Anchorage and	
			other locations.	
Statewide General Permit	Х		POA-2014-55, Placer Mining Activities within the State of	
			Alaska.	

# **Assumption of 404 Powers**

Assumption Status	Yes	No	Detail		
Assumed		Χ			
Working Toward Assumption	Χ		In Spring 2013, the Alaska State Legislature passed Senate		
			Bill 27, which authorized ADEC to evaluate Section §404		
			assumption and work towards developing an application.		
			All funding for this effort has been removed; however,		
			the mandate to evaluate Section §404 assumption still		
			remains. (Everything is in a holding pattern until the price		
			of oil goes back up and funding is available).		
Explored Assumption	Х		Assumption has been reviewed several times and so far		
			rejected. The state is exploring alternatives available to		
			manage isolated wetlands.		

**Description:** Assumption has been reviewed several times and rejected. The current Administration is exploring assumption and/or a SPGP. It is also exploring alternatives available to manage isolated wetlands. For more information about Alaska's efforts to assume the 404 program, download: <a href="http://dec.alaska.gov/Water/wetlands404/docs/SoA\_Effort\_to\_become\_primary\_404\_agency.pdf">http://dec.alaska.gov/Water/wetlands404/docs/SoA\_Effort\_to\_become\_primary\_404\_agency.pdf</a>.

# **Joint Permitting**

Joint 401 and 404 public notices are provided with a 30-day comment period. DNR's Office of Project Management and Permitting coordinates permitting on large projects.

# **Special Area Management Plans and Advanced Identification Plans**

Kodiak and the Kenai have adopted wetland management plans which set forth detailed policies. Contact these municipalities for specfics.

#### **Buffer Protections**

There may be 60- and 100-foot buffers that apply to wetlands owned by the state. Contact the state for more information on their buffer protections.

# **Mitigation Policy**

Mitigation is conducted by the Army Corps of Engineers. The ADEC has not adopted legislation, regulations, or policies on avoidance and minimization procedures, or compensatory mitigation.

#### **Mitigation Database**

The Corps tracks mitigation in Alaska through the federal RIBITS database. The state does not track mitigation.

# **Section C. Monitoring and Assessment**

# **Agency Responsible for Wetland Monitoring and Assessment**

The ADEC has no formal monitoring program for wetlands or streams, but has a monitoring strategy for surface water quality with a wetland component. All monitoring, data collection, and water sampling occur on an informal basis. Alaska's surface water quality monitoring strategy can be downloaded from: <a href="http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm">http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm</a>.

#### Mapping/Inventory

- ADEC produced an inventory of tidally-influenced wetlands in 1977.
- Approximately 36% of Alaska's wetlands have been mapped by the National Wetlands
  Inventory; most areas in Alaska have not been mapped or classified. However, detailed
  inventories have been conducted for some communities and coastal areas.

# **State Wetland Mapping Public Portal**

None.

#### Wetland Classification and Assessment

Alaska has two assessment tools:

- 1) The state developed a hydrogeomorphic (HGM) functional assessment methodology to evaluate wetlands across the state. HGM guidebooks have been developed for three areas: flat wetlands on precipitation driven and discontinuous permafrost in Interior Alaska, flat/slope wetland complexes in the Cook Inlet Basin ecoregion, and riverine and river proximal wetlands in coastal southeast and south central Alaska. This was one of the first HGM functional assessments developed in the U.S. The HGM approach is primarily used in the state for assessing and classifying wetlands, mitigation, and restoration efforts. The Corps and consultants also use the guidebooks in conjunction with §404 permitting. However, the HGM tool is used minimally, as it is very cumbersome. Only portions of the tool are used.
- The state also developed a wetland rapid functional assessment tool. This tool was groundtruthed using the HGM model. The state is looking at further developing this tool.

## **Statewide Wetland Monitoring Plan**

None.

# **Overall Wetland Gain and Loss Tracking System**

The state does not track overall wetland gain and loss, though the Corps does track wetland loss associated with permitting.

# **Wetland Monitoring and Assessment Characteristics**

For more information, contact Terri Lomax, 907-269-7635, dec.akmap@alaska.gov, http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm.

Level	None	Level 1	Level 2	Level 3
Alaska				

Туре	None	IBI	Conditional	Functional
Alaska		(None)		Developing

Frequency	None	Project Specific	Ongoing
Alaska		X	

# **Participation in National Wetland Condition Assessment**

NWCA Study Type	Yes	No
National Study	X	
State Intensification Study		Х

# **Section D. Water Quality Standards**

# **Wetland and Water Quality Standards**

Туре	None	Use Existing WQ Standards	In Process	Adopted	Future Direction
Wetland-specific Designated Uses		Х			
Narrative criteria in the standards to protect designated wetland uses		х			
Numeric criteria in the standards based on wetland type and location to protect the designated uses		х			
Anti-degradation policy includes wetlands		x			

**Description:** Alaska's antidegradation policy, WQS, and designated uses are not specific to wetlands. If a water body is considered an "outstanding natural resource" such as water in a wildlife refuge or has high ecological importance, then that water body must be protected and maintained. Designated uses apply to all waters of the state and include uses that relate to wetlands such as propagation of fish and drinking water. WQS are narrative, biological, and chemical. The state's wetland program plan includes actions to review what the state has in terms of standards.

#### **Section E. Voluntary Wetland Restoration**

Alaska has no formal, statewide voluntary wetland restoration program; however, there are various wetlands restoration efforts taking place in Juneau, Anchorage, and Fairbanks through community watershed partnerships. These partnerships usually involve federal, state, and local agencies; non-profits; and citizens. The ADEC may provide some technical support to private landowners for mitigation and restoration, but this takes place infrequently. The HGM functional assessment guidebooks are a major tool guiding restoration in the state. The state has used 319 funds to support wetland restoration planning.

# Types of Wetland Restoration Work Funded by the State:

Type of Work	YES	NO	Description
Fund Wetland Restoration (may		Х	
include easement agreements)			
Private Land Restoration		Х	
Public Land Restoration		Х	
Technical Assistance	Х		(Infrequently, ad hoc)
Tax Incentives		Х	
Other		Х	

# **Voluntary Wetland Restoration Program Components**

Wetland Restoration Efforts	Nothing in the Works	Planning	In Progress	Mature/ Complete
Program has a set of restoration goals	N/A			
Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes	N/A			
Developed multi-agency body to coordinate restoration/ protection efforts	N/A			
Set restoration goals based on agency objectives and available information	N/A			

# **Goals for Restoration Projects\***

Goal	Yes	No	Description
No Net Loss	N/A		
Reverse Loss/Net Gain	N/A		
Nonpoint Source Pollution (NPS)/WQ	N/A		
Total Maximum Daily Load (TMDLs)	N/A		
Habitat	N/A		
Coastal Protection	N/A		
Floodwater Protection	N/A		
Groundwater	N/A		
Other (please describe)	N/A		

# **Restoration Tracking**

N/A

# Landowner Guides and Handbooks to Assist with Voluntary Wetland Restoration Efforts

Contact Alaska Bureau of Land Management for more information.

# Section F. Innovative and/or Highly Effective Education and Outreach

The state hosts an Alaska Forum on the Environment.

# **Section G. Climate Change and Wetlands**

The state is involved in climate change issues, specifically coastal erosion impacts on infrastructure. Most of this work is being done with the University of Alaska Fairbanks. The wetland program is not involved in this work directly. Climate change efforts are coordinated out of the Governor's Office. Additionally, Fish and Wildlife is looking at the Yukon River Delta – sea level rise and shifting wetlands. This is a 3-5 year study looking at how these changes are affecting nesting birds.

# **Section H. Integration**

Entity/Program Area	Yes/No	Description of the Connection
NPDES/Stormwater	YES	Both SW and wetland permits from same section;
		look at both programs when reviewing permits
303(d)	U/K	
305(b) reporting on wetlands	U/K	
Total Maximum Daily Load (TMDLs)	YES	Include requirements for discharges to be part of
		permit conditions.
Climate Change/ Resiliency	YES	Informally
Land Use /Watershed planning	YES	Informally; but not through DEC (DNR perhaps)
Flood/Hazard Mitigation	U/K	Not through DEC; DNR perhaps?
Coastal Work		Through water program municipal grants and loans
		(moving to upland, away from erosion area)
Wildlife Action Plan	NO	
Statewide Comprehensive Outdoor	U/K	DNR?

Entity/Program Area	Yes/No	Description of the Connection
Recreation Plan (SCORP)		
Other (Specify)	NO	

# **State Wetland Program Continuum**

Continuum Stage		Core Element 1: Regulation	Core Element 2: Monitoring & Assessment	Core Element 3: Wetland Water Quality Standards	Core Element 4: Voluntary Restoration
Mature Stage	High	х			
Initial Implementation	on Stage				
<b>Development Stage</b>			X		
Early Stage	l Low			X	x

#### **Section I. Contact Information**

# James Rypkema

Program Manager, Storm Water and Wetlands Wastewater Discharge Authorization Program Division of Water, Alaska Department of Conservation 555 Cordova Street Anchorage, AK (907) 334-2288 James.Rypkema@alaska.gov

#### **Section J. Useful Websites**

# **State Government Links**

- 1. Alaska Department of Environmental Conservation
  - a) Division of Water
    - i. Alaska's Wetlands

http://dec.alaska.gov/water/wwdp/wetlands/

- Alaska Wetlands Initiative
   http://water.epa.gov/grants\_funding/wetlands/facts/upload/alaska.pdf
- <u>Status of Alaska's Wetlands</u>
   <a href="http://www.fws.gov/wetlands/Documents/Status-of-Alaska-Wetlands.pdf">http://www.fws.gov/wetlands/Documents/Status-of-Alaska-Wetlands.pdf</a>
- ii. Water Quality Standards

http://dec.alaska.gov/water/wqsar/wqs/index.htm

- iii. Nonpoint Source Strategy
  <a href="http://dec.alaska.gov/water/wnpspc/pdfs/2007">http://dec.alaska.gov/water/wnpspc/pdfs/2007</a> NPSStrategy.pdf
- iv. Nonpoint Source Water Pollution Control Program

## http://dec.alaska.gov/water/wnpspc/index.htm

- Total Maximum Daily Load
   http://dec.alaska.gov/water/tmdl/tmdl\_index.htm
- v. Water Quality Program Management Plan http://dec.alaska.gov/water/wqapp/ADEC WPQMP Rev6.PDF
- vi. Monitoring & Assessment Program
  <a href="http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm">http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm</a>

#### **Federal Government Links**

- U.S. Army Corps of Engineers Alaska District Regulatory Division http://www.poa.usace.army.mil/Missions/Regulatory.aspx
- 2. U.S. Environmental Protection Agency: Region 10 Alaska Operations Office <a href="http://water.epa.gov/type/wetlands/index.cfm">http://water.epa.gov/type/wetlands/index.cfm</a>

# **Other Wetland Organization Links**

- Alaska Society of Wetland Scientists
   http://www.sws.org/regional/alaska/aboutus.html
- 2. University of Alaska Anchorage
  - a) Alaska Natural Heritage Program: Aquatic Ecology http://aknhp.uaa.alaska.edu/aquatic-ecology/
- Center for Alaska Coastal Studies
   http://www.akcoastalstudies.org/school-programs/61-beluga-wetlands.html
- 4. Great Land Trust: In Lieu Fee Program

Great Land Trust (GLT) was founded in 1995 by and for Alaskans to work in partnership with willing landowners to protect Southcentral Alaska's lands and waterways. GLT uses voluntary means to conserve land including land donations, conservation easements and land purchases from interested sellers. In 1998, GLT signed an agreement with the Alaska District of the U.S. Army Corps of Engineers (Corps) to establish a Fee-Based Compensatory Program under the Clean Water Act. GLT uses the fees it receives through this program to purchase and restore ecologically valuable wetlands within the Municipality of Anchorage. In 2011, Great Land Trust updated our agreement with the Army Corps of Engineers as required by the 2008 Mitigation Rule.

http://www.greatlandtrust.org/whatwedo/wetlandmitigation.html

5. Alaska Waterfowl Association

AWA's members are passionate about hunting waterfowl, conserving wetlands, preserving waterfowl habitat and promoting the hunting and outdoor heritage. Through our programs and local projects we ensure that AWA continues to do our part in promoting conservation and waterfowl management.

http://akwaterfowl.com/