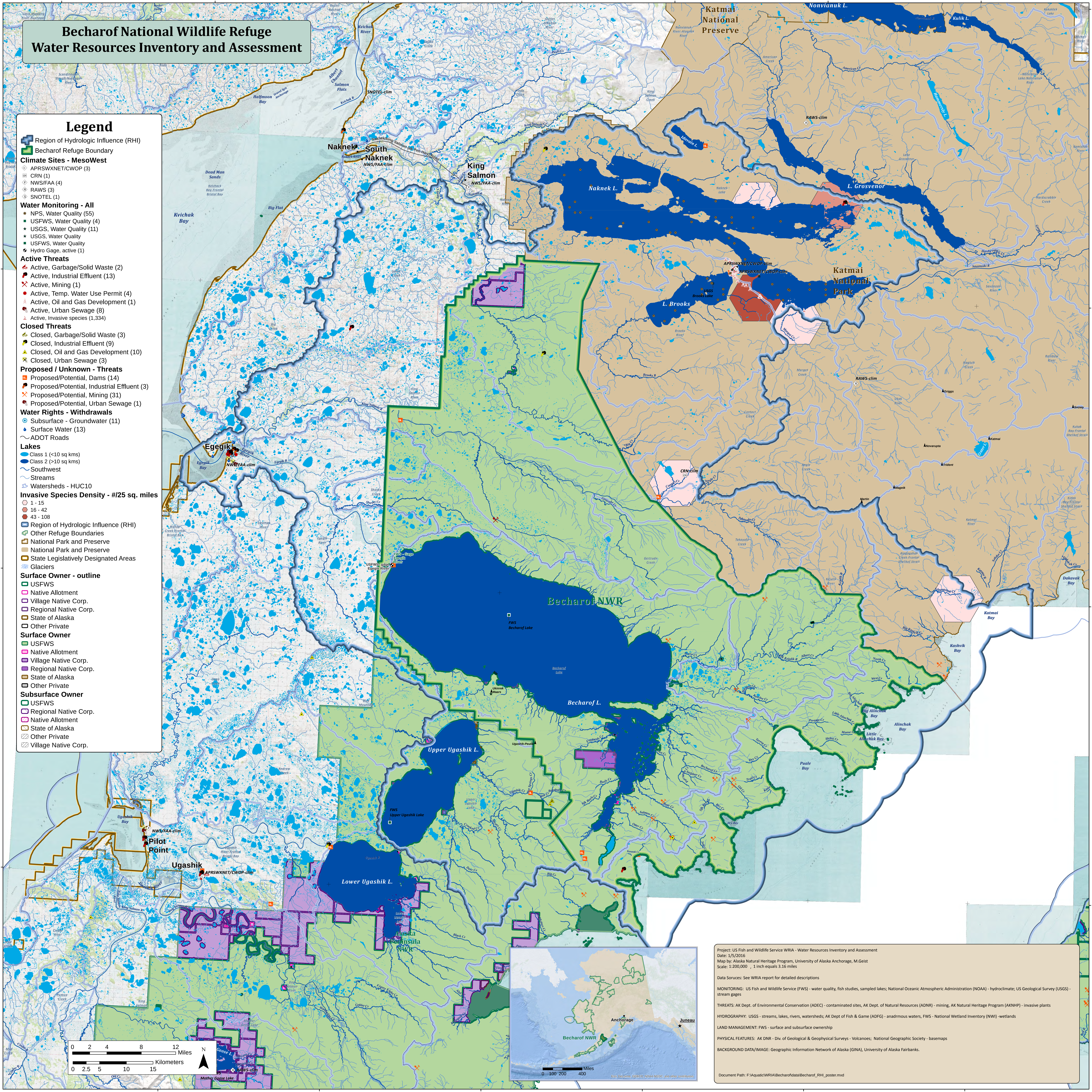
Becharof National Wildlife Refuge
Water Resources Inventory and Assessment


158°0'0"W
157°30'0"W
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156°30'0"W
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155°30'0"W
155°0'0"W
59°0'0"N
58°30'0"N
58°0'0"N
57°30'0"N
Little Muklung River-Nushagak
Keefer Cutoff
Outlet Kvichak River
Kvichak River
Outlet Alagnak River
Coffee Creek
Pauls Cr
Pauls Creek
Scandinavian Slough-Nushagak River
Albert Channel
Salmon Flats
SNOTEL-clim
Halfmoon Bay
Gravel Spit Anchorage
Kvichak R
King Salmon Cr
Naknek
South Naknek
Naknek River
NWS/FAA-clim
Naknek/King Salmon (ak Pen Hwy) Road
King Salmon
Eskimo Cr
Naknek R
Smelt Cr
Naknek River
Dead Man Sands
Kvichack Bay-Frontal Bristol Bay
Big Flat
Kvichak Bay
Smelt Creek
Big Creek
King Salmon River
King Salmon R
Katmai National Preserve
Nonvianuk River-Alagnak River
Nonvianuk L.
Nonvianuk R
Kulik L.
Kukaklek Lake
McNeil River
American Creek
American Cr
Nonvianuk Lake-Nonvianuk River
King Salmon Creek
Hammersly L.
RAWS-clim
Idavain L.
Kamishak River
Lake Grosvenor
Naknek L.
Naknek Lake
L. Grosvenor
Hardscrabble Creek
Gorge Cr
Hardscrabble Cr
Savonoski R
APRSWXNET/CWOP-clim
APRSWXNET/CWOP-clim
Katmai National Park
USGS Brooks Lake
L. Brooks
Savonoski River
Brooks River
Margot Cr
Rainbow River
Ikagluik Creek
Margot Creek
Brooks R
Griggs
Ukak River
Snowy
Contact Creek
Kukak Bay-Frontal Shelikof Strait
Novarupta
Katmai
Crater L.
Trident
Big Cr
CRN-clim
Contact Cr
Angle Cr
Angle Creek
Mageik
Martin
Kinak Bay-Frontal Shelikof Strait
Gertrude Cr
Takayofo Cr
Takayofo Creek
Katmai River
Gertrude Creek
Alagogshak Creek-Frontal Shelikof Strait
Soluka Cr
Katmai R
Dakavak Cr
Dakavak Bay
Kejulik River
Kejulik R
Alagogshak Cr
Katmai Bay
Becharof NWR
Big Kashvik Cr
Kashvik Bay
Egegik
Egegik River
Egegik Bay
Egegik R
NWS/FAA-clim
Shosky Creek
Shosky Cr
Swampy River
Bishop Creek-Frontal Bristol Bay
Egegik River
FWS - Gage Egegik River
USFWS- gage Egegik River
FWS Becharof Lake
Becharof Lake
Ukinrek Maars
Becharof L.
Marie Cr
Kejulik R
Albert Cr
North Cr
West Cr
Margaret Cr
Katrine Cr
Big Alinchak Cr
Big Alinchak Bay
Alinchak Bay
Little Alinchak Cr
Little Alinchak Bay
Portage Cr
Moose Cr
Helen Cr
Teresa Cr
Dry Cr
Puale Bay
Dago Creek
Blue Mountain
Andrew Creek
Upper Ugashik L.
Ugashik-Peulik
Featherly Cr
Camp Cr
Cleo Cr
Becharof Cr
Porcupine Cr
Sulphur Cr
Burls Cr
Trail Cr
Oil Cr
Katie Cr
Hot Springs Cr
Barabara Cr
Blue Cr
Sfk Burls Cr
Bear Cr
Salmon Cr
Sfk Rex Cr
Rex Cr
Otter Cr
Dry Bay
Jute Cr
Kanatak Cr
Big Cr
Pike L.
Ugashik Bay
NWS/FAA-clim
Pilot Point
Ugashik
APRSWXNET/CWOP-clim
Ugashik River-Frontal Bristol Bay
Ugashik River
King Salmon River
King Salmon R
Dog Salmon R
FWS Upper Ugashik Lake
Upper Ugashik Lake
Ugashik Cr
Crooked Cr
Moore Cr
Deer Cr
Ugashik R
Lower Ugashik L.
Lower Ugashik Lake
Alaska Peninsula NWR
Black Cr
Cinder River
Mud Creek
Pumice Creek
King Salmon River
Dog Salmon River
Figure Eight Cr
Gobler Cr
Wandering Cr
Alai Cr
Kanatak Cr
Mother Goose Lake
Goose L.
Volcano Cr
Dog Salmon Cr
RAWS-clim
FWS Mother Goose Lake
Cinder R
Old Cr
Cinder B
Tiny Cr
Pass Cr
Des Moines Cr
0 2 4 8 12 Miles
0 2.5 5 10 15 Kilometers
N
Anchorage
Juneau
Becharof NWR
0 100 200 400 Miles
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Legend

- Region of Hydrologic Influence (RHI)
- Becharof Refuge Boundary

Climate Sites - MesoWest
- APRSWXNET/CWOP (3)
- CRN (1)
- NWS/FAA (4)
- RAWS (3)
- SNOTEL (1)

Water Monitoring - All
- NPS, Water Quality (55)
- USFWS, Water Quality (4)
- USGS, Water Quality (11)
- USGS, Water Quality
- USFWS, Water Quality
- Hydro Gage, active (1)

Active Threats
- Active, Garbage/Solid Waste (2)
- Active, Industrial Effluent (13)
- Active, Mining (1)
- Active, Temp. Water Use Permit (4)
- Active, Oil and Gas Development (1)
- Active, Urban Sewage (8)
- Active, Invasive species (1,334)

Closed Threats
- Closed, Garbage/Solid Waste (3)
- Closed, Industrial Effluent (9)
- Closed, Oil and Gas Development (10)
- Closed, Urban Sewage (3)

Proposed / Unknown - Threats
- Proposed/Potential, Dams (14)
- Proposed/Potential, Industrial Effluent (3)
- Proposed/Potential, Mining (31)
- Proposed/Potential, Urban Sewage (1)

Water Rights - Withdrawals
- Subsurface - Groundwater (11)
- Surface Water (13)
- ADOT Roads

Lakes
- Class 1 (<10 sq kms)
- Class 2 (>10 sq kms)
- Southwest
- Streams
- Watersheds - HUC10

Invasive Species Density - #/25 sq. miles
- 1 - 15
- 16 - 42
- 43 - 108
- Region of Hydrologic Influence (RHI)
- Other Refuge Boundaries
- National Park and Preserve
- National Park and Preserve
- State Legislatively Designated Areas
- Glaciers

Surface Owner - outline
- USFWS
- Native Allotment
- Village Native Corp.
- Regional Native Corp.
- State of Alaska
- Other Private

Surface Owner
- USFWS
- Native Allotment
- Village Native Corp.
- Regional Native Corp.
- State of Alaska
- Other Private

Subsurface Owner
- USFWS
- Regional Native Corp.
- Native Allotment
- State of Alaska
- Other Private
- Village Native Corp.

Project: US Fish and Wildlife Service WRIA - Water Resources Inventory and Assessment
Date: 1/5/2016
Map by: Alaska Natural Heritage Program, University of Alaska Anchorage, M.Geist
Scale: 1:200,000 , 1 inch equals 3.16 miles

Data Soruces: See WRIA report for detailed descriptions

MONITORING: US Fish and Wildlife Service (FWS) - water quality, fish studies, sampled lakes; National Oceanic Atmospheric Administration (NOAA) - hydroclimate; US Geological Survey (USGS) - stream gages

THREATS: AK Dept. of Environmental Conservation (ADEC) - contaminated sites, AK Dept. of Natural Resources (ADNR) - mining, AK Natural Heritage Program (AKNHP) - invasive plants

HYDROGRAPHY: USGS - streams, lakes, rivers, watersheds; AK Dept of Fish & Game (ADFG) - anadrmous waters, FWS - National Wetland Inventory (NWI) -wetlands

LAND MANAGEMENT: FWS - surface and subsurface ownership

PHYSICAL FEATURES: AK DNR - Div. of Geological & Geophysical Surveys - Volcanoes; National Geographic Society - basemaps

BACKGROUND DATA/IMAGE: Geographic Information Network of Alaska (GINA), University of Alaska Fairbanks.

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