Protection of surface waters through the State of Alaska on Alaska Refuges

Case study of Uganik River Reservation of Water within Kodiak NWR

Statutory Mandates affecting Water Rights on Refuges

- Alaska National Interest Lands Conservation Act (ANILCA) (1980)
  - Primary purpose of each refuge in Alaska
    - Conserve habitats in natural diversity
    - Ensure “water quality and necessary water quantity”
- National Wildlife Refuge System Improvement Act (NWRSIA) (1997)
  - Maintain biological integrity/diversity/health
  - Maintain adequate water quantity - quality
  - Acquire water rights under State law

Other Water & Law Factors on Alaska Refuges

- Prior appropriation state w/ abundant water in unique hydrological and ecological systems
- Progressive state water law
- Expressed but unquantified FRWR in Alaska refuges
- Sparse baseline hydrologic data
- Limited ecological / biological data for aquatic habitat
- Economic factors
  - oil/gas development, placer mining, water export, fisheries/wildlife, recreation, navigation, etc.
- Whole, intact, mostly pristine waters and watersheds, with water rights uncertainty

Agency Mission Statements: Conflicts & Similarities

- The U.S. Fish and Wildlife Service's (FWS) mission is working with others to **conserve**, *protect, and enhance* fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

- The Alaska Department of Natural Resources' (DNR) mission is to *develop*, **conserve** and *maximize the use* of Alaska's natural resources consistent with the public interest.

Mission Statements: Conflicts & Similarities cont…

FWS

- Conserve
- Protect and enhance fish, wildlife, plants, and their habitats
- for the benefit of the American people

DNR

- Conserve and maximize
- Develop the use of natural resource (lands and waters)
- for public interest

Mission Statements: Conflicts & Similarities cont…

A Reservation of Water is the best route to gain protection and provide conservation….it is an opportunity.

The FWS aims to meet its legal obligations to protect the natural diversity of populations and habitats under ANILCA by working through the state. It is the appropriate first step in ensuring water quality and quantity for refuges.

Agency's Water Right Policy

FWS

- Obtain sufficient water and water rights
- Secure water rights under State law
- Assert and protect Federal interests in water, as necessary

DNR

- Assure state interests within water for the public
- Neutral in determination of a reservation decision

Reservation of Water Purposes

AS 46.15.145 (a)(1)

- Protect fish and wildlife
  - Habitat, propagation, and migration
- Recreation
  - Swimming, fishing, hunting, natural values, etc.
- Navigation/Transportation
  - Sufficient quantity for boats, floatplanes, etc.
- Water quality
  - Sanitary and water quality reasons

Agency's Water Right Process

- FWS:
  - Conserve fish and wildlife populations and habitats in their natural diversity (ANILCA)
  - Ensure water quality and necessary water quantity within the refuge (ANILCA)
  - Maintain the natural flow regime (natural hydrograph: magnitude, frequency, duration, time and rate of change)
  - Protect flows for important life stages and channel form and function
- DNR
  - Reserved to the people for common use and is subject to appropriation and beneficial use…
    - Adjudication process assures:
      - water is allocated in a reasonable and consistent manner based in part by public interest criteria
      - Determination of the validity and amounts of a water right.
        - Including conflicting claims among competing applications.

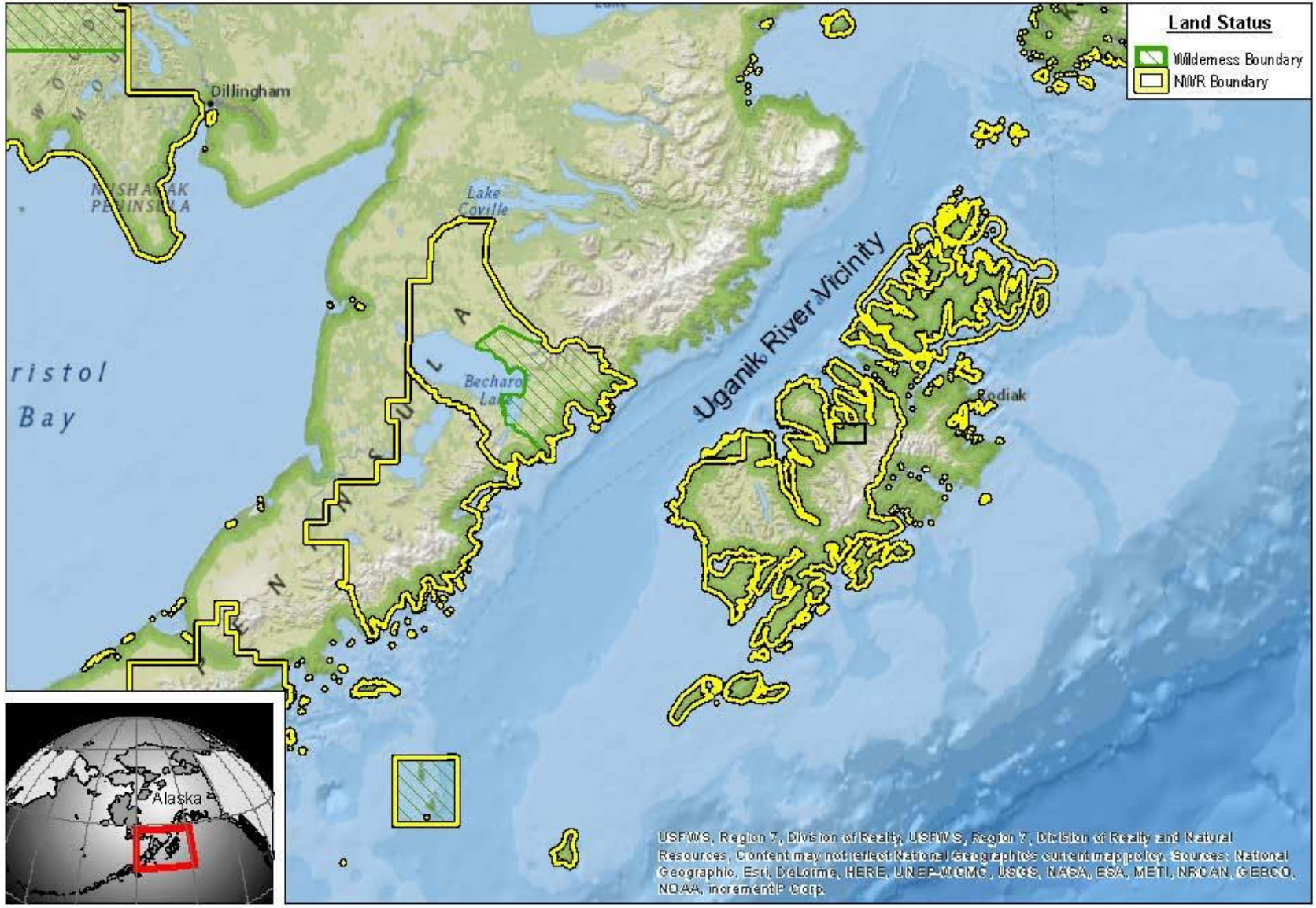
Why the Uganik River?

- First adjudication between DNR and FWS
- Data rich area (27 years of flow data)
- Strong fisheries component
- Low/No conflict issues that may arise in other FWS applications
- Straightforward
- An excellent start point

Uganik River History & Importance

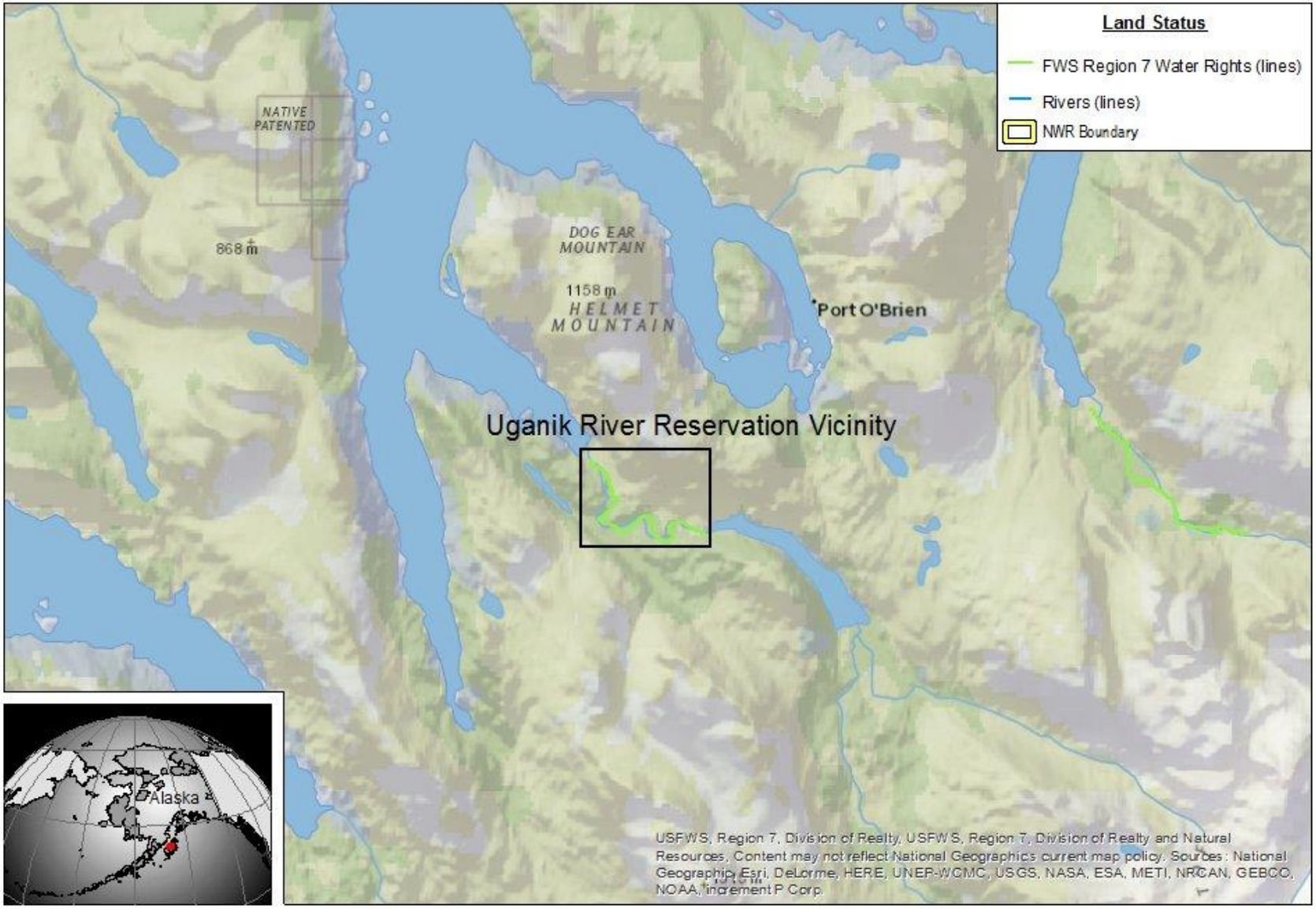
- Provides migratory, spawning, and rearing habitat for sockeye, pink, chum, Coho and chinook salmon, steelhead, and Dolly Varden
- The Uganik River drainage basin is considered a major rainbow trout area
- The lower river is high use, key habitat for brown bear
- The East Arm of Uganik Bay, into which the Uganik River flows, provides prime wintering habitat for puddle ducks and maintains a high concentration of waterfowl.
- Subsistence hunting and trapping for residents of Port Lions and Ouzinkie

Uganik River Vicinity



Map generated August 12, 2016

Uganik River Reservation Viciinity

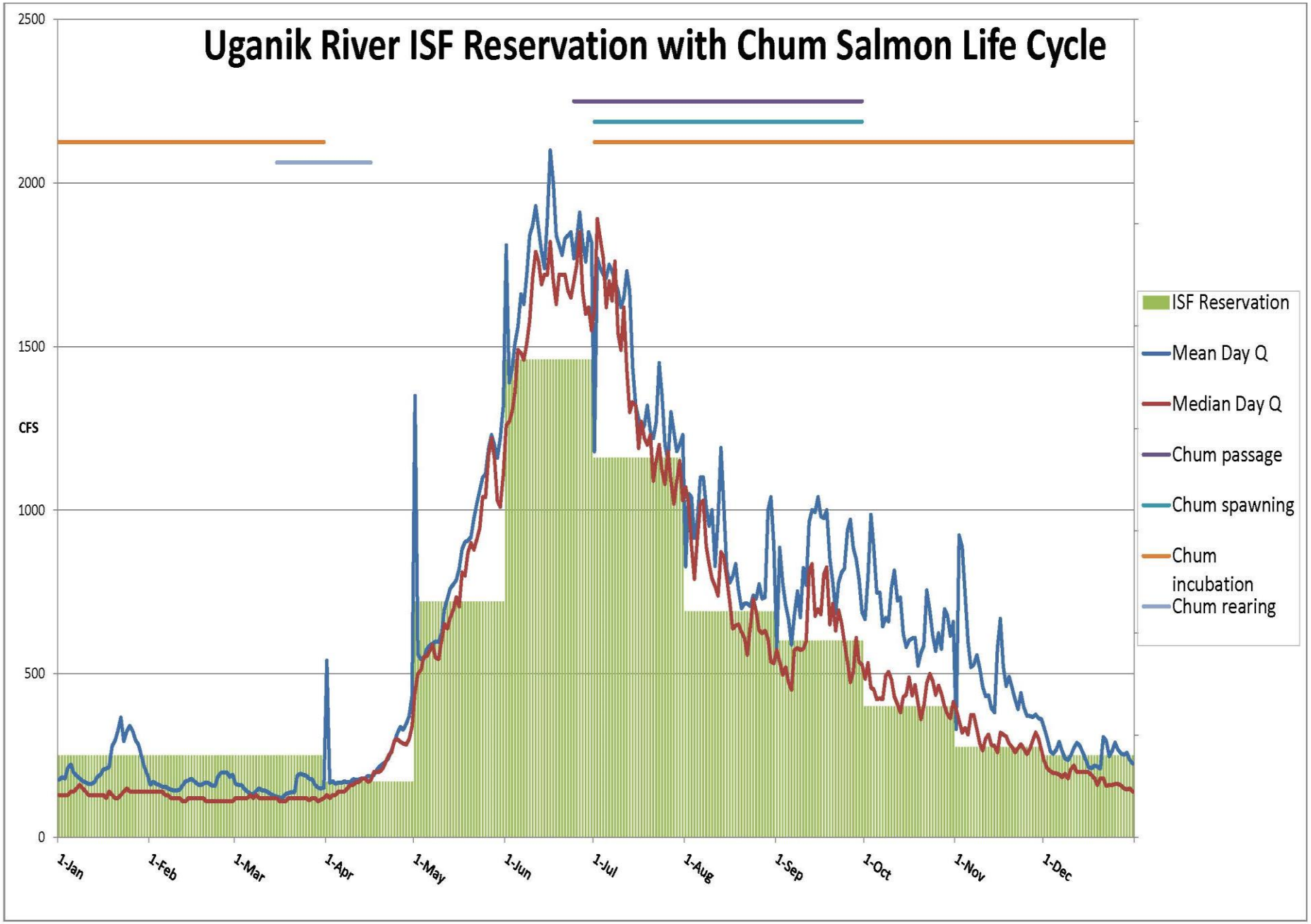


Map generated August 12, 2016

Uganik River

Uganik River Reservation Process

- Review the annual hydrograph
- Include the biologic aspect of the system in the form of fish life stage events
- Consider periods of changing flow, duration of those events, and magnitude of those events
- Define reservation time periods
- Define volume of flow associated with each time period


Uganik River ISF Reservation with Chum Salmon Life Cycle
2500
2000
1500
1000
500
0
CFS
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov
1-Dec
ISF Reservation
Mean Day Q
Median Day Q
Chum passage
Chum spawning
Chum incubation
Chum rearing

Uganik River Reservation Timeline

- Applied for on 9/27/2001
- Adjudication process began January 31, 2012
- Email and in face correspondence between DNR and USFWS March 20, 2012 – June 12, 2014.
- Public/Agency notice published August 1, 2014
- Certificates signed September 19, 2014
- Recorded certificates received January 14, 2015

Considerations in Flow Discussions

- USFWS
  - Fisheries/biological purpose
  - Critical habitat needs
  - Timing of flow events
  - Overwintering
  - Channel form and function
  - River continuum paradigm
- DNR
  - Fisheries/biological purpose
  - Critical habitat needs
  - Timing of flow events
  - Competing uses (prior/future)
  - Unappropriated Flows
  - Laws
  - Public Resource

Uganik Reservation Discussion

Time Period	Mean Time Discharge (cfs)	USFWS Requested Flow (cfs)	% Exceed	ADNR 1/2014 (cfs)	% Exceed	USFWS (cfs)	% Exceed	ADNR 4/3/2014 (cfs)	% Exceed	USFWS (cfs)	% Exceed	FWS alt 5/20/14	% Exceed
January*	232	250	18-20%	150	45%	230*	25%	150	45%	200	32%	200	32%
February*	167	250	18%	130	45%	180*	25%	130	45%	150	34%	170	27%
March*	150	250	10%	125	45%	150*	25%	125	45%	140	35%	147	28%
April 1-14	172	140	50%	119	70%	140	50%	140	50%	140	50%	140	50%
April 15-30	274	245	50%	175	70%	245	50%	245	50%	245	50%	245	50%
May 1-14	623	589	50%	355	70-75%	590	50%	590	50%	590	50%	590	50%
May 15-31	1049	958	50%	730	70-75%	960	50%	960	50%	960	50%	960	50%
June	1770	1460	64%	1280	75%	1460	60-65%	1460	60-65%	1460	60-65%	1460	60-65%
July	1460	1160	62-63%	990	75%	1160	60-65%	1160	60-65%	1160	60-65%	1160	60-65%
August	896	690	55-56%	559	70%	690	55-60%	690	55-60%	690	55-60%	690	55-60%
September	832	600	50%	416	70%	600	45-50%	600	45-50%	600	45-50%	600	45-50%
October	675	400	56%	318	70%	400	55-60%	400	55-60%	400	55-60%	400	55-60%
November	503	275	54-55%	198	70%	338	45%	338	45%	338	45%	338	45%
December	258	250	35-36%	120	70%	200	45%	200	45%	200	45%	200	45%

***Consents but acknowledges flows are insufficient to protect fish and wildlife habitat, migration, and propagation**

Certificated Flows

TIME PERIOD	Mean Time Period Discharge (cfs)	Original Flow Requests (cfs)	Granted Reservation Flows (cfs)	Reservation Flows (gpd)	Remaining Flows for Appropriation (cfs)	Remaining Flows for Appropriation (gpd)
January*	232	250	200	129,254,400	32	20,680,704
February*	167	250	150	96,940,800	17	10,986,624
March*	150	250	140	90,478,080	10	6,462,720
April	226	170				
April 1-14	172		140	90,478,080	32	20,680,704
April 15-30	274		245	158,336,640	29	18,741,888
May	859	720				
May 1-14	623		590	381,300,480	33	21,326,976
May 15-31	1049		960	620,421,120	89	57,518,208
June	1770	1460	1460	943,557,120	310	200,344,320
July	1460	1160	1160	749,675,520	300	193,881,600
August	896	690	690	445,927,680	206	133,132,032
September	832	600	600	387,763,200	232	149,935,104
October	675	400	400	258,508,800	275	177,724,800
November	503	275	338	218,439,936	165	106,634,880
December	258	250	200	129,254,400	58	37,483,776

*Consents but acknowledges flows are insufficient to protect fish and wildlife habitat, migration, and propagation

DNR Criteria in Decision

- A certificate of reservation can only be issued if the four criteria are met:
  1. Prior appropriators rights aren't affected
  2. Need exists
  3. Unappropriated waters exist
  4. Public interest (AS 46.15.080 (b))

Changed Perspectives

- FWS
  - An understanding for DNRs mission
  - Better understanding of the state adjudication process
  - Willingness to compromise within the limits of our mission goals
- DNR
  - Better understanding of FWS mission
  - Willing to assist in the application process and applying for a reservation of water – 11 AAC 93.142(c)

Changed Perspectives/Results

- FWS
  - Good working relationship with DNR
  - Completion of Uganik adjudication
  - Cooperative scheduling of future adjudications
- DNR
  - Working with the applicant
  - Defendable decision document (legally/purpose based)
  - Certificate of **Protection**

The Uganik River was fully within refuge lands with minimal chance of any development occurring, which gave DNR the opportunity to view this river slightly different than other rivers.

Adjudication Results – Goals met?

- Were there struggles between the two agencies? YES
  - Response delays
  - Unclear request/responses
  - Additional projects/other work
- Did the agencies come to an agreeable conclusion without elevation? YES
- Were there lessons learned for the next FWS file adjudicated? YES
  - Both agencies!

Lessons Learned

- Initiate a kick off meeting to discuss each parties concerns/desires and outline action plan-clear action plan will avoid future misunderstandings
- Each party should set goals for the process by clarifying what issues in the application are the most important
- Create a timeline associated with the action plan that is agreed to by both organizations-the timeline will provide an schedule and a projected date for finalization
- Create a forum for open and transparent communication
- While there is an understanding that certain documents need additional internal review, a quicker adjudication occurs when requested actions are carried out in a speedy manner
- One single point of contact familiar with the application

The End!

Questions?

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