CENWP-ODT-F 14 July 2022

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 14 July 2022 FPOM meeting. The meeting was held via WebEx In attendance:

Last	First	Agency	Email	
Bellerud	Blane	NOAA	Blane.Bellerud@noaa.gov	
Bettin	Scott	BPA	swbettin@bpa.gov	
Cates	Rebecca	NWP-BON	Rebecca.I.Cates@usace.army.mil	
Cooper	Erin	FPC	ecooper@fpc.org	
Cordie	Robert	NWP-TDA	Robert.P.Cordie@usace.army.mil	
Derugin	Andrew	NWP-BON	Andrew.G.Derugin@usace.army.mil	
Ebel	Jonathan	IDFG	Jonathan.Ebel@idfg.idaho.gov	
Fielding	Scott	NWP-JDA	Scott.D.Fielding@usace.army.mil	
Gallion	Darren	NWP	Darren.G.Gallion@usace.army.mil	
Griffith	Denise	NWW-LMN	Denise.S.Griffith@usace.army.mil	
Johnson	Bobby	NWW-MCN	Bobby.johnson@usace.army.mil	
Juhnke	Steve	NWW-PPM	steve.d.juhnke@usace.army.mil	
Krasnow*	Lynne	NOAA	lynne.krasnow@noaa.gov	
Lampman	Ralph	Yakama	lamr@yakamafish-nsn.gov	
Lawonn*	James	ODFW	Matthew.J.Lawonn@state.or.us	
Lotspeich	Michael	NWP-JDA	Michael.D.Lotspeich@usace.army.mil	
Macdonald	Jacob	NWP	Jacob.Macdonald@usace.army.mil	
Mackey	Tammy	NWP	Tammy.m.mackey@usace.army.mil	
Madson	Patricia	NWP	Patricia.L.Madson@usace.army.mil	
Martinson	Rick	PSMFC	Rickdm@gorge.net	
McClain	Nathan	NWP	Nathan.A.McClain@usace.army.mil	
McDowell*	Michelle	USFWS	michelle_mcdowell@fwa.gov	
McGrath	Claire		cmcgrath@usbr.gov	
Morrill	Charlie	WDFW	Charles.Morrill@dfw.wa.gov	
Peery	Chris	NWW	Christopher.A.Peery@usace.army.mil	
Peterson*	Christine	BPA	chpetersen@bpa.gov	
Porter	Laurie	CRITFC	porl@critfic.org	
St. John	Scott	NWW	Scott.j.st.john@usace.army.mil	
Strong	Noah	NWP-FFU	Noah.E.Strong@usace.army.mil	
Sullivan	Leah	BPA	lssullivan@bpa.gov	

Swank	David	USFWS	David_Swank@fws.gov	
Swieca	Kelsey	NMFS	kelsey.swieca@noaa.gov	
Tidwell	Kyle	NWP-FFU	Kyle.S.Tidwell@usace.army.mil	
Urmston	Jennifer	USFWS	jennifer_urmston@fws.gov	
Van der Leeuw	Bjorn	NWP-FFU	bjorn.k.vanderleeuw@usace.army.mil	
Van Dyke	Erick	ODFW	erick.s.vandyke@odfw.oregon.gov	
Wendler	Jeanette	NWP-BON	Jeanette.C.Wendler@usace.army.mil	
Wertheimer	Bob	NWP-FFU	Robert.H.Wertheimer@usace.army.mil	
Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil	

*Called in for Avian discussion

1. Decisions made at this meeting:

- **1.1.** Approved June meeting minutes
- **1.2.** Next FPOM will be in person at Bonneville Dam
- 1.3. Add MFR/MOC tracking as an FPOM agenda item
- **1.4.** The Corps will pursue hazing AWPE from the fishways of LMN, MCN, and TDA.
- **1.5.** 22JDA07 MOC Block Study Running SFL in Shad Mode for Ladder Cooling Concurrence to do the study. MOC to be modified with even blocks and monitoring of PL passage.

2. Action Items

2.1. NWW

2.1.1.[July 22] LWG adult CH fallback (Bellerud/Swieca) **ACTION:** Bellerud will send the presentation and write up to be posted to the FPOM website.

2.2. NWP

- **2.2.1.**[July 22] Lethal Removal **ACTION:** Madson/Sachs will provide more detail about NEPA cooperating agency status.
- **2.2.2.**[July 22] 22BON038 MOC Pre-Rock Removal Hydro Survey **ACTION**: Macdonald will put BON spillway rock removal on the FFDRWG agenda and report back to FPOM.
- **2.2.3.**[July 22] 22JDA07 MOC Block Study Running SFL in Shad Mode for Ladder Cooling **ACTION:** Grosvenor will address the suggestions and update the MOC for distribution.
- **2.2.4.**[June 22] NWP/NWW Critical Fish Passage O&M needs. **ACTION:** Mackey will see if trunnion pin would be appropriate for this list and report back next FPOM.
- **2.2.5.**[June 22]22JDA07 MOC Block Study Running SFL in Shad Mode for Ladder Cooling-ACTION: Grosvenor will get the channel velocity data with and without shad mode and report back to FPOM.

2.3. Completed Action Items or to be discussed later in the agenda

- **2.3.1.**[June 22] Fish Count Program update (Peery, Wertheimer). **ACTION:** Bellerud will put together a draft summary of the fallback data for July FPOM. *STATUS: Summary will be presented to FPOM later in the agenda*.
- **2.3.2.**[June 22] Estuary Avian. **ACTION:** Krasnow will set up a work group for avian estuary actions. *STATUS: completed. Meeting held 30 June.*
- **2.3.3.**[June 22] Avian NEPA. **ACTION**: Madson will work with Schmidt to identify the cooperators and whomever would like to be included in a NEPA task group. *STATUS*: Schmidt and Madson will begin to schedule out meetings with NEPA cooperators by the end of the month.

- **2.3.4.**[June 22] 22BON003 Channel Velocity. **ACTION:** Wright will contact Conder for comment. *STATUS: Conder's comments added to Change Form 22BON003 to be discussed later in the agenda.*
- **2.3.5.**[June 22] 22LGS005 ASW Closure Criteria. **ACTION:** Swank will send the performance report out for review. *STATUS: Completed*.

3. Updates

3.1. NWW Updates

- **3.1.1.**Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).
 - **3.1.1.1.** 22 MCN 09 MOC Delay Removing TSW's started removing on Mon should be done by end of week.
 - **3.1.1.2.** 21 IHR 15 MOC Unit 2 special generator testing. Work is now off the calendar. MOC can be withdrawn.
 - **3.1.1.3.** 22 IHR 05 MOC Diffuser #10 intake trash rack cleaning -Work completed as scheduled, took an hour.
 - **3.1.1.4.** 22 LMN 01 MOC North Fish Ladder Debris Barrier- Scheduled for August. No change
 - **3.1.1.5.** 22 LMN 07 MOC Spillbay Outage to Install Sensors Work completed took two hours longer than anticipated
 - **3.1.1.6.** 20 LGS 16 MOC Powerhouse Roof Repair- on schedule working on section over U1
 - **3.1.1.7.** 22 LGS 06 MOC Powerhouse Roof Repair- additional outage for August to cover the CCVT Safety access to work underneath
 - **3.1.1.8.** 21 LWG 08 MOC Trash Rake Crane Replacement (May 2022). No updated schedule for this work.
- **3.1.2.**McNary crane status. No changes. FPP change form for operation to be discussed later in the meeting.
- **3.1.3.**IHR South entrance temps. Ebel said temperatures are not transmitting to FPC from the south entrance. Peery said they are aware there has been transmission issues and they are working on it.

3.2. NWP Updates

- **3.2.1.**Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).
 - **3.2.1.1.** 21BON001 MOC Navigation Lock 1 (old navlock) Bridge Replacement scheduled for CY 2023.
 - **3.2.1.2.** 22BON004 MOC T12 OOS. Moved outage to 29 Aug-15 Sep No update
 - 3.2.1.3. 22BON009 MOC T11 BPA Outage. Moved outage to 18 July-5 Aug No update
 - **3.2.1.4.** 19TDA04 MOC Crane rail Replacement winter (on going work) No update
 - 3.2.1.5. 22TDA05 MOC Exit Boom Install. Planned for winter maintenance period No update
 - 3.2.1.6. 22TDA07 MOC Shed Placement at Westrick Park No update
 - **3.2.1.7.** 22TDA08 MOC East Ladder Weir 155 Rehab Plane is to pull gear boxes in August.
 - **3.2.1.8.** 18JDA02 MOC Trash rack replacement. No update
 - 3.2.1.9. 20JDA04 MOC STS crane replacement. Design phase. No update
 - 3.2.1.10.22JDA03 MFR South Fish Turbine #2 OOS. Work delayed due to U3 issues.
- **3.2.2.**TDA AWS debris management Kick off meeting on 7/13. Reevaluate the nine alternatives. Kovalchuk is the PM on this.
- **3.2.3.**TDA trunnion pin. Gate 9 trunnion would be part of a larger project to completely rehab Gates 1-9. SAP shows start in 2031, Construction 2034. No updates.
- **3.2.4.** JDA north pump #4. OOS for entire year no money to repair. No update
- **3.2.5.** JDA spill bay 10. Still operating in manual.
- **3.2.6.** JDA SFL Temperatures. Temps being collected.
- **3.3. NWS updates.** No updates

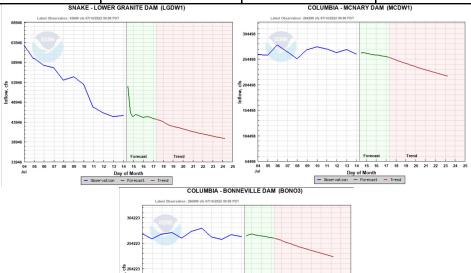
3.4. Research/FFDRWG updates.

- **3.4.1.NWP FFDRWG.** TDA AWS debris management team back to work. Preliminary results from B2FGE hydraulic testing to share next meeting. Next meeting will be 4 Aug (first Thursday)
- **3.4.2.NWW FFDRWG.** 25 August next meeting Bettin inquired about the IHR/MCN cylinders and asked if there was a solution. Juhnke will check the notes.
- **3.4.3.SRWG**. Development for test of increased spill. 28 July is the next meeting.
- 3.4.4.2022 Research and Access requests
 - **3.4.4.1.** BON Aqui-S long term solution. No major changes for researchers in 2022.

3.5. RCC update.

Table 1. NOAA Northwest River Forecast Center inflow forecast.

Project	Previous Day (7/13) Average Outflow (kcfs)	5 Day (7/19) Forecasted Inflow (kcfs)	10 Day (7/24) Forecasted Inflow (kcfs)	Forecasted Inflow Low/High (kcfs)
LWG	44.5	42	40	
MCN	275.2	242	221	
BON	263.9	247	227	



- **3.6. Fish Count Program update (Peery, Wertheimer)**. Some challenges with staffing. Few days need to be rereported. Swank asked if the high steelhead count at BON and CHJ at TDA were to be looked at. Peery said yes.
 - **3.6.1.**BON WDFW Tule counters. FCS contract Covid practices will be shared with WA.
- 3.7. LWG adult CH fallback (Bellerud/Swieca) presentation summary, 2022 fallback at LWG was high but similar to 2020 and 2017. Significant lower rates observed during reduced spill rates. Management strategies successful at protecting fish from higher fallback at high spill rates. Fallbacks cannot solely be attributed to 'weak' fish that fallback at every dam. Fallback rate @ LWG was significantly influenced by outflow, spill flow & forebay temperatures. Van Dyke

asked about species type. Fish were CH all tagged above LWG. Swieca looked at Spill flow, not spill percent. Ebel said IDFG does a lot of fallback work for genetic stock specific abundance estimate at LWG. Asked about fish tagged above as juveniles and fish tagged at LWG.

ACTION: Bellerud will send the presentation and write up to be posted to the FPOM website.

3.8. Pinniped update

- **3.8.1.**Bonneville Dam. Below 20 animals, monitoring for abundance ongoing no animals this last week although some showed up on 24 June.
- **3.8.2.** Willamette Falls. No update

3.9. Lamprey update

- 3.9.1.BON LPS Cates said there were a lot of fish passing. LFS was shut down on June 16. Swank commented on the LFS and asked whether it will be operated next year. Macdonald said no, The Accords were working on what to do with it in the future. PDT will get fired up looking at a more tradition LPS type structure. Will be discussed in FFDRWG.
- **3.9.2.**TDA Lamprey improvement team has not met in a while. Changes to trapping equipment were made for easier access. The catch rate is increasing.
- **3.9.3.** JDA Numbers starting to pick up.
- 3.9.4.NWW No update for adults. Snake River strainer inspections go to mid-June at MCN until mid-July. 18 MCN Jul 5, 110 IHR June 8, 4 LMN July 12, 3 LGS July 7, 119 LWG on June 30. A few projects will continue strainer inspections.
- **3.9.5.**Lamprey Accords Work Group (Macdonald). Site visits to the LFS to figure out steps forward. Next quarterly in Sept.
- **3.10. BPA update**. Spreadsheet on the FPOM website.
- **3.11.** NWP/NWW Critical Fish Passage O&M needs. Spreadsheet on FPOM website. Some additional items still need to be ranked.

3.12. Avian updates (10:30)

- 3.12.1.NWW -Snake River projects hazing ended late June. MCN AWPE and terns, hazing ends July 23. Peery said AWPE are in the MCN fishways. Asked about removing them from the fishway. Shared pictures of the AWPE in the fishway. Asked USFWS about process to remove them from the fishways. Morrill said he understood that AWPE can be hazed at this time. Approval process from the WA commission has been pushed back to Sept for the down listing of AWPE. McDowell said permits are not needed for hazing, but trap and relocation would need an authorization. Johnson said they need approval for hazing and may work on some exclusion. Some AWPE are swimming in, some are flying in, they are adapting very quickly. Ebel is on board with the regulating agency's need to act on this one quickly. Krasnow said she also supports the Corps ability to haze AWPE out of the ladder. Van Dyke said hazing AWPE is not new, but it is new to hazing them in the ladder. Johnson said bars were installed to exclude them from the exit. Concern is the growing numbers. Van Dyke said that he thought that hazing has been ok for over a year. Peery said they were unclear. Griffith said they also are experiencing AWPE in the ladder at LMN. Hazing will begin at LMN, MCN, and TDA to remove the AWPE from the ladders. Ebel asked for detailed notes. Cordie said that USDA was holding off until WA gives the go ahead to haze the AWPE.
- **3.12.2.JDA** ~100 AWPE foraging in the tailrace, 6 grebes in forebay few gulls. No AWPE in the ladders.
- 3.12.3.TDA -Gull numbers dropped during June high flows and falconry, several hundred pelicans zeroing in on the spillway. AWPE are in the fishway at the count station. Trying to move them around but they are stubborn. Hazing will probably not work. Need to capture and relocate. Cordie asked USFWS what it would take. McDowell will provide contact for that permit. Entering through the exit trash rack. Lawonn asked if relocating works with AWPE. Asked if AWPE lethal would be added to the NEPA EA. USDA hazing through the end of July. Falconry ended today (14 July). Van Dyke asked when the AWPE started to get

into the ladder. Cordie said this was a new thing. Information about AWPE shared by McClain and Ebel listed at the end of the meeting notes.

- **3.12.4.BON** -Less than five grebes in the Forebay, less than 10 gulls, 20 Osprey.
- 3.12.5.Estuary- Miller/Pillar Island, no DCCO, Rice Island-continuing to monitor, no CATE monitored on Island proper. ESI - Cap flight July 8 data, counts of 2,752 CATE returned using colony and 161 DCCO, south beach side dissuading CATE. Only 8 eggs found on the colony no multiple eggs in any scrap. 58 CATE scraps mostly staying on colony. Lawonn asked about peak number of individual CATE and differing numbers. Tidwell said Cap flight data on June 7 was 859 CATE. Lawonn is interested in low numbers in beginning of the season and higher numbers on Rice. Fewer CATE on East Sand Island. Lawonn said close to 0 productivity on ESI colony the last four years, and he foresees there would be an imminent collapse of the ESI colony. Didn't know if there is a backup colony. McDowell said colony that failed in Puget Sound was second largest.in the population. Krasnow wanted to know why USFWS were not more proactive to habitat protection of these species. McDowell said status assessments were done and in 2011 they looked at all potential sites and extensive reach out work resulted in negative responses to establishes another tern colony else where the one site that worked was San Francisco Bay. Lawonn mentioned the Corps transferring ownership of ESI to USFWS to manage as the USFWS has the resources to manage the right size colony and ensure that productivity occurs, and this may be something that can be revisited. Krasnow thought this would be something that they would consider. Macdonald mentioned this is a navigation feature and the Corps would not give up rights to it, but a management partnership would be a good idea. McDowell remembers past resistance on both the Corps and USFWS.
- 3.12.6.Lethal Removal No update. Rename this item NEPA Hazing. Ebel asked about cooperating agency status, reached out to the Idaho governor's office, and said they have not been contacted. McDowell asked about lethal take for AWPE and if it would be added. Lawonn urges the limited use of hazing lethal take of AWPE as well. Lawonn said that he did not believe Oregon had been contacted for cooperators status. Van Dyke would like more details on who has been contacted. Morill asked if anyone from Washington was in on the cooperating agencies list. ACTION: Madson/Sachs will provide more detail about NEPA cooperating agency status.
- **3.12.7.Ringold pelicans** (Morrill/Wertheimer). Brief of hazing during release has been posted.

4. Coordination/Notification forms (need concurrence/discussion)

- 4.1. NWW
 - **4.1.1.**22 LWG 08 MOC BPA Outage 500 kV line Full line outage Nov 14-18
 - **4.1.2.**22 LGS 08 MOC BPA Outage 500 kV line Nov 07-11
 - **4.1.3.**22 LMN 06 MOC BPA Outage 500 kV line Oct 31to Nov 04 Ebel asked if outage was taking advantage of the other work going on. Bettin said yes.
 - **4.1.4.**22 IHR 06 MFR Date Change Condition Monitoring No comments
 - **4.1.5.**22 IHR 07 MOC Fish Release Pipe Install Outage and Unit 3 Turbine Testing Just went out. Van Dyke asked where U3 was in the priority list. When U3 comes up U1 will go down for its rehab. It will then be second in priority. Bettin asked when U3 will come up. Peery said looking at end of August beginning of Sep. Comments due in a week. Van Dyke asked for notification if other issues come up that would prevent this from occurring. Peery will update as information comes in.
 - **4.1.6.**22 LGS 07 Orifice Plug Fish Mortality- No comments
 - **4.1.7.**22 LWG 04 MOC T1T2 Gasket Repair TVA coming in mid Nov 2022 to work on first phase prior to Christmas. Return in 2023 for work on other five phases. T2 planned for July, Aug, Sept will not require full PH outage, T1 planned for Oct Nov work will require full PH outage. Ebel asked for a plan B for adult passage in case they can't find the ladder.

Bettin asked if full PH outage in July was covered in the MOC. One day in July there will be 100% spill. Peery will update the MOC.

- **4.1.8.**22 LWG 06 MFR Emergency Debris Spill No comments
- **4.1.9.**22 LWG 07 MFR VBS Screen Damage No comments
- **4.1.10.**22 LWG 09 MFR Adult Chinook salmon Mortalities No comments
- 4.1.11.22 JFT 02 MFR Release Collected Fish at Lower Monumental Dam -No comments
- **4.1.12.**22 JFT 03 MFR Release Collected Fish at Lower Granite Dam -No comments

4.2. NWP

- **4.2.1.**22BON027 PH1 Forebay Gill Net Removal -No comments
- **4.2.2.**22BON028 037 MFRs for fish morts No comments
- **4.2.1.**22BON038 MOC Pre-Rock Removal Hydro Survey -Cates said this work is done to see if it is necessary to bring the dredge into the spillway, due to high flows there are concerns with rock movement onto the apron. Work is planned for Sept 1. Van Dyke asked if this was the standard operation. Madson said yes, it is similar to what was done last year. Van Dyke asked what was done to limit debris from going up onto the apron. Mackey said there was a PDT working on this, need to pass this to Macdonald for FFDRWG discussion. **ACTION:** Macdonald will put BON spillway rock removal on the FFDRWG
 - **ACTION:** Macdonald will put BON spillway rock removal on the FFDRWG agenda and report back to FPOM.
- **4.2.2.**22TDA10 MFR Fish unit shutdown No comments
- **4.2.3.**22TDA11 MFR Spillbay 14 OOS. Expected to be out for the season. Cordie -Gate can only move about a foot before tripping out. Cause is unknown until they can bulkhead and trouble shoot. The project doesn't want to risk operation in case of a seized trunnion. Length of outage is unknown until they can identify the cause.
- **4.2.4.**22TDA12 MOC Fish unit intake ROV No comments
- **4.2.5.**22JDA07 MOC Block Study Running SFL in Shad Mode for Ladder Cooling test shad mode to see if there is cooling capability in the ladders. 2018 2019 temp differentials Van Dyke is not prepared to give a go ahead. Ebel said there is a need to identify what temp differential is a success with this study. Fielding said this is another way to look at cooling the ladder down. Ebel said he would like to see if this could be an interim operation until a cooling structure could be completed. Ebel also expressed the importance of tracking lamprey passage during the study. Bellerud said he wants to proceed with a cooling tower however as an interim operation go ahead with this test. Swank said he is ok with proceeding but concerned with lamprey passage impacts. Swank suggested adding another day to the block to get an even number. Ebel would like real time temperature data at the NWP projects and wants a schedule for the block tests. **ACTION:** Grosvenor will address the suggestions and update the MOC for distribution.

5. Fish Passage Plan

- **5.1.** The 2022 FPP went into effect March 1 and is available online at:
 - pweb.crohms.org/tmt/documents/fpp/2022/
 - **5.1.1.**PENDING Change Forms:
 - **5.1.1.1.** 22BON003 Channel Velocity (Derugin). Discussed at May and June FPOM. Conder's comments added June 9. Derugin to follow up with him. No conclusion, item will remain pending.
 - **5.1.1.2.** 22LGS004 ASW Crest Elevation (NWW). Discussed at June FPOM. Lorz wants to add a high flow threshold (>120 kcfs) to keep ASW at 618 ft. Conder wants to keep as originally proposed and adjust with forebay regardless of flows. Approved as originally proposed and pending more discussion on whether to add a high flow threshold. Will remain pending.

- 5.1.1.3. 22MCN005 Reduced Auto Operation of Spillway Hoists & Cranes (Peery). Discussed at June FPOM. *Revised by Laughery to add a table for July/Aug. Reposted July* 7. Plan to replace hoists but due to funding limitation will take 10 years. Want to cycle which hoists are on automatic mode. Plan to start Monday. Ebel said it is discussed briefly at FPAC. Lorz had reservation about it. Ebel asked for it to be moved to next month. Morrill also asked for it to be moved to next month's agenda. Peery said the only solution was more funding. Otherwise, replacement schedule over next 10 years. Van Dyke asked if this decision was going to be made by the project and if FPOM input will make a difference. Peery said project was implementing. Swank said perhaps monitor spill impacts from these operations.
- **5.1.2.**NEW Change Forms: NONE

6. Task Group Updates.

- **6.1.** Task Group Non-native piscivorous fish (Hausmann). <u>Documents / FPOM / 2021 / FPOM Task Groups (crohms.org)</u> Nothing has changed, Oregon not on board. Hausmann and Ebel suggested taking this off the agenda.
- **6.2.** Task Group Kelt Trigger (Wertheimer and Lorz). <u>Documents / FPOM / 2013 / FPOM Task Groups (crohms.org)</u>
 - **6.2.1.** Task Group meeting following July FPOM. Surface passage routes for kelts at B2CC and The Dalles IT sluiceway. Postponed to next August.
- **6.3.** Task Group Hazing NEPA (CRC and Schmidt). <u>Documents / FPOM Avian Task Group</u> (<u>crohms.org</u>). Schmidt asked to roll this back, as previously discussed initial meetings will be scheduled with agency cooperators as part of the NEPA steps forward.

Information on AWPE sent in the chat

from Nathan Mcclain to everyone: 10:55 AM

https://www.pacificflyway.gov/Documents/Awp_plan.pdf

from Nathan Mcclain to everyone: 10:56 AM

Above is a link to Pacific Flyway Plan: A Framework for the Management of American White Pelican

Depredation on Fish Resources in the Pacific Flyway

from Nathan Mcclain to everyone: 10:57 AM

Predation by American White Pelicans and Double-Crested Cormorants on Catchable-Sized Hatchery

Rainbow Trout in Select Idaho Lentic Waters.

DOI: 10.1080/02755947.2015.1120835

from Jonathan Ebel to everyone: 11:00 AM

Predation by American White Pelicans on Yellowstone Cutthroat Trout in the Blackfoot River Drainage, Idaho;

 $\frac{https://collaboration.idfg.idaho.gov/FisheriesTechnicalReports/Teuscher\%20et\%20al\%202015\%20Pelicans\%20Cutthroat\%20Predation.pdf$

from Jonathan Ebel to everyone: 11:01 AM

Most of our hazing work is described in our regional management reports.

from Jonathan Ebel to everyone: 11:01 AM You can search "pelican" in IDFG's library:

 $https://collaboration.idfg.idaho.gov/FisheriesTechnicalReports/Forms/AllItems.aspx? View= \{386ce64c-bbd9-4e6a-8865-92a8ba32bf8a\} \& SortField=Publish_x0020_Date\& SortDir=Desc\& FilterClear=1 \} \\$