



Grant County
PUBLIC UTILITY DISTRICT
Excellence in Service and Leadership

Priest Rapids Fish Forum
Meeting

Wednesday, 7 February 2018
9:00 a.m. – 12:00 p.m.
Grant PUD, 11 Spokane St., Suite 205B, Wenatchee, WA
Call-In Number: 1-800-977-8002, Bridge: 7422882

MEETING MINUTES

PRFF REPRESENTATIVES

Steve Lewis, USFWS	Patrick Verhey, Chad Jackson, WDFW
Bob Rose, YN	Breean Zimmerman, WDOE
Doris Squeochs, Wanapum	Aaron Jackson, Carl Merkle, CTUIR
Jason McLellan, CCT	Keith Hatch, BIA
Mike Clement, Grant PUD	Chris Mott, Grant PUD
Tracy Hillman, Facilitator	Erin McIntyre, Grant PUD

ATTENDEES

Mike Clement, Grant PUD	Chris Mott, Grant PUD
Sean Gowdy, YN (Via Phone)	Erin McIntyre, Grant PUD
Pat Wyena, Wanapum	Patrick Verhey, WDFW
Dave Burgess, WDFW	Doris Squeochs, Wanapum (Via Phone)
Matt Polacek, WDFW	Steve Lewis, USFWS
RD Nelle, USFWS	Bob Rose, YN
Breean Zimmerman, WDOE (Via Phone)	Tom Skiles, CRITFC (Via Phone)
Ralph Lampman, YN	Tracy Hillman, Chair

Action Items:

1. Chris Mott will work with Golder on how to estimate the number of PIT-tagged sturgeon harvested in the Tribal and recreational fisheries.
2. Tracy Hillman will contact Lisa DeBruyckere to see if she can call into a future PRFF meeting to discuss the invasive species draft action plan.

3. Steve Lewis will add Wanapum to the invasive species action plan's participation list. He will also provide updates to the PRFF on the status of the draft action plan.
 4. PRFF members will review the draft resident fish report and provide comments to Mike Clement by 7 March 2018.
 5. PRFF members will review the draft Pacific lamprey annual report and provide comments to Mike Clement by 7 March 2018.
- I. **Welcome and Introductions** – Tracy Hillman welcomed everyone to the Priest Rapids Fish Forum (PRFF or Forum) meeting. Participants introduced themselves.
 - II. **Agenda Review** – Members reviewed and approved the draft January meeting minutes with edits.
 - III. **Approve November Meeting Notes** – The January 2018 Draft Meeting Minutes were reviewed and approved during the meeting.
 - A. Review Action Items from the January Meeting
 1. Breean Zimmerman will contact Ecology's Environmental Assessment Program to get more information on the effects of the herbicide used to control Eurasian milfoil on lamprey. **Complete. Breean stated that Ecology conducted a risk assessment on Triclopyr TEA.**
 2. Chad Jackson will check with the Yakama Nation to see if they (or CRITFC) are collecting biological information from sturgeon harvested in the Project Area. In addition, Chad will see if the Yakama Nation is proposing another fishery this year. **Chad sent Tracy a spreadsheet showing the total number and weight of sturgeon sold to the buyer (see discussion below).**
 3. Mike Clement will send Chad Jackson a formal invitation to present results from the 2017 resident fish surveys at the February Meeting. **Complete.**
 4. Comments on the draft Bull Trout report are due to Chris Mott by 14 January 2018. **Complete. The final report was sent to FERC and Ecology.**
 5. Tracy Hillman will send an email to John Ferguson thanking him and the ASWG for providing answers to the Pacific Lamprey Subgroup questions. **Complete.**
 6. Mike Clement will provide the Forum with additional information about the fishway tour in February. **Complete. Mike said they will meet at the HOB on Tuesday 13, February.**
 7. Members of the PRFF will review the draft adult lamprey NNI Statement of Agreement and provide comments to Mike Clement by 31 January 2018. **Complete. The SOA will be reviewed today.**
 - IV. **Aquatic Invasive Species**
 - A. **ESA Compliance for Invasive Species Response** – Tracy Hillman reported that Bob Rose shared with him the Draft Action Plan for ESA Compliance for Quagga/Zebra mussel response in the Columbia River Basin. The Pacific States Marine Fisheries Commission, USFWS, and NOAA are developing the plan with several partners. Tracy send the action plan to the PRFF on 31 January 2018. He noted that the objectives of the action plan are to:

- Facilitate to the extent possible the “front-loading” of conservation measures to avoid and minimize adverse impacts to ESA-listed species and critical habitats during emergency response actions.
- Facilitate and expedite non-emergency ESA Section 7 consultations on rapid response actions.
- Clarify and better inform the *Columbia River Basin Interagency Invasive Species Response Plan* relative to the scope of federal agency response activities.
- Inform existing state rapid response plans for Oregon, Washington, Idaho, and Montana.
- Improve communication and coordination among jurisdictions and other regional entities.
- Foster comprehensive mitigation approaches to reduce risks that affect multiple jurisdictions.
- Maximize economies of scale by leveraging individual capabilities and sharing resources and information.
- Avoid duplication of efforts by leveraging information developed to date by individual states and entities. Each state will share information and benefit from the completed work and lessons learned of other states as each completes action items in this plan.

Steve Lewis shared that they (USFWS) are working on the document and would appreciate any comments on the draft action plan. Bob said this is mostly an FYI for the PRFF. If the Forum would like more information, he and Tracy will contact Lisa DeBruyckere to discuss it with the PRFF. Steve Lewis indicated he will keep the Forum updated on the action plan but agreed it would be good to have Lisa join a future meeting to answer any questions we may have. Steve also agreed to add Wanapum to the action plan's participation list.

V. White Sturgeon Management Plan

- A. **Update on Juvenile Rearing** – Chris Mott indicated that the juvenile sturgeon at Marion Drain are doing well. He shared a graph from Donella Miller comparing the growth of juvenile sturgeon this year to previous years (see Attachment 1). The figure indicates that sturgeon growth this year is on par with previous years. Mike Clement indicated that the fish will be tagged and released in a couple months.
- B. **Annual Report** – Chris Mott said they recently completed their work with Golder on the annual report. The Forum should see the report sometime next week. The annual report will include a ten-year comprehensive review of the white sturgeon program. Golder will give a presentation on results from the sturgeon program next month.
- C. **Update on Sturgeon Fishery in the Priest Rapids Project Area** – Tracy Hillman indicated that he received the following table from Chad Jackson regarding the Yakama Nation sturgeon fishery within the Project Area. The table summarizes fish tickets (harvested sturgeon sold to a buyer).

CATCH AREA	REPORT MONTH	NUMBER	TOTAL WEIGHT (LBS)
Priest Rapids	October	61	2,886.00
Priest Rapids	November	19	987.57
Priest Rapids	November	9	438.50

CATCH AREA	REPORT MONTH	NUMBER	TOTAL WEIGHT (LBS)
Priest Rapids	November	25	1,143.50
Priest Rapids	December	1	62.90
Priest Rapids	December	18	796.00
Wanapum	October	30	1,635.00
Wanapum	November	20	1,016.00
Wanapum	December	4	244.00
Wanapum	December	7	340.00
TOTALS:	--	194	9,549.47

It is unknown if the harvested fish were scanned for PIT tags. Members voiced concern that tagged fish not detected in the harvest will compromise the monitoring program. That is, harvested fish with tags will appear as natural mortalities in the monitoring program. Members discussed ways to deal with this uncertainty, including modeling the number of tagged fish harvested. The simplest way to deal with this issue is to scan all harvested fish for PIT tags. Mike Clement added that 2018 is the third year of the five-year supplementation agreement.

D. **Other White Sturgeon Items** – No additional sturgeon items were discussed.

VI. Resident Fish Study

A. **Presentation on Resident Fish Sampling** – Dave Burgess (WDFW) gave a presentation titled, “2017 Priest Rapids Project Area Resident Fish Survey” (see Attachment 2). Dave began by describing the requirements in the Resident Fish Management Plan. He then described the sampling regime, methods, and analyses. He identified the indices calculated (e.g., CPUE, Index of Biotic Integrity, biomass, species richness, etc.). He noted over the three surveys (2009-10, 2012, and 2017), largescale suckers, northern pikeminnow, and reidside shiners consistently made up the largest percentage of fish captured, and these species have increased in abundance (CPUE) over time. Although the CPUE for northern pikeminnow has increased over time, the average length and weight of northern pikeminnow have decreased over time. Dave also pointed out that the biotic indices have not changed over time (IBI scores have ranged from 46-48). Dave indicated that these IBI scores indicate “good” conditions. Dave concluded the presentation by discussing future work. He noted that the survey will be repeated in 2022 and asked the PRFF to consider modifying the IBI model to be specific to the Priest Rapids Project Area. Members requested that WDFW also provide results separately for the two reservoirs (Wanapum and Priest Rapids).

Tracy Hillman reminded the Forum that comments on the Resident Fish Report are due to Mike Clement by 7 March 2018. Deb Firestone (Grant PUD) sent the draft report to the PRFF on 5 February 2018.

B. **Other Resident Fish Items** – No additional resident fish items were discussed.

VII. Pacific Lamprey Management Plan

A. **Comprehensive Report** – Tracy Hillman stated that Deb Firestone (Grant PUD) sent the Pacific Lamprey Annual Report to the PRFF on 5 February 2018. Comments are due to Mike Clement by 7 March 2018. Mike Clement shared some of the highlights from the report and noted that comments from the Forum during the recent presentation were addressed in the report and PowerPoint presentation appended to the annual report.

- B. **Fish Ladder Tour** – Mike Clement indicated that the fishway tour is currently scheduled for Friday, 9 February but may be modified depending on people’s availability. Attendees will meet at the Hydro Office Building (HOB) in Beverly.
- C. **Grant PUD Draft SOA on Adult Lamprey Translocation** – Tracy Hillman noted that he received comments only from Steve Lewis on the draft SOA. Bob Rose indicated that he and others have discussed the draft SOA and asked about the timing of trapping, numbers of adults to be trapped, and the percent of the run to be trapped. He said these important elements are missing from the draft SOA. Mike Clement responded that these details were left out of the SOA at this time to encourage discussion. He wanted to focus first on the overall idea or approach. Mike added that he was looking to trap and haul 300 to 500 adult lamprey per year. Grant PUD would do this work; they would not contract this work to an outside source. Bob asked if the target number is captured early in the trapping period, do you then terminate trapping for the year? Mike said yes unless there is a need for additional fish (e.g., for Chelan or Douglas PUD studies).

Bob asked if Grant PUD intends to trap over the distribution of the lamprey run or only within a short time period. Mike indicated that trapping would be consistent with past years. That is, they would trap during the peak of the run. He added they would propose to trap for 2-3 weeks (not to exceed 40 hours per week) during the peak run period. Additional trapping could be done before or after that period to collect adult lamprey for other entities and purposes. The additional effort would have to be funded by the entities requesting additional fish. Mike added that the fish they collect for their program would be transferred and released upstream from Rock Island Dam. However, those fish could be handed off to other entities if the entities want to translocate those fish into upstream locations.

RD Nelle asked if Grant PUD would be willing to agree to trapping for a fixed number of days (i.e., 15 days) each year during the peak adult migration period. Mike said he thinks they could commit to trapping for three weeks, but he would have to discuss this internally. Bob indicated that it would be useful if Grant PUD staff collected genetic samples from the fish trapped. Bob added that with cost shares they would be able to analyze the fish genetically. Bob wants to make sure the period of trapping would not affect the genetic structure or sex ratio of the population. Both Bob and Tom Skiles discussed the possible issues with early versus late running fish.

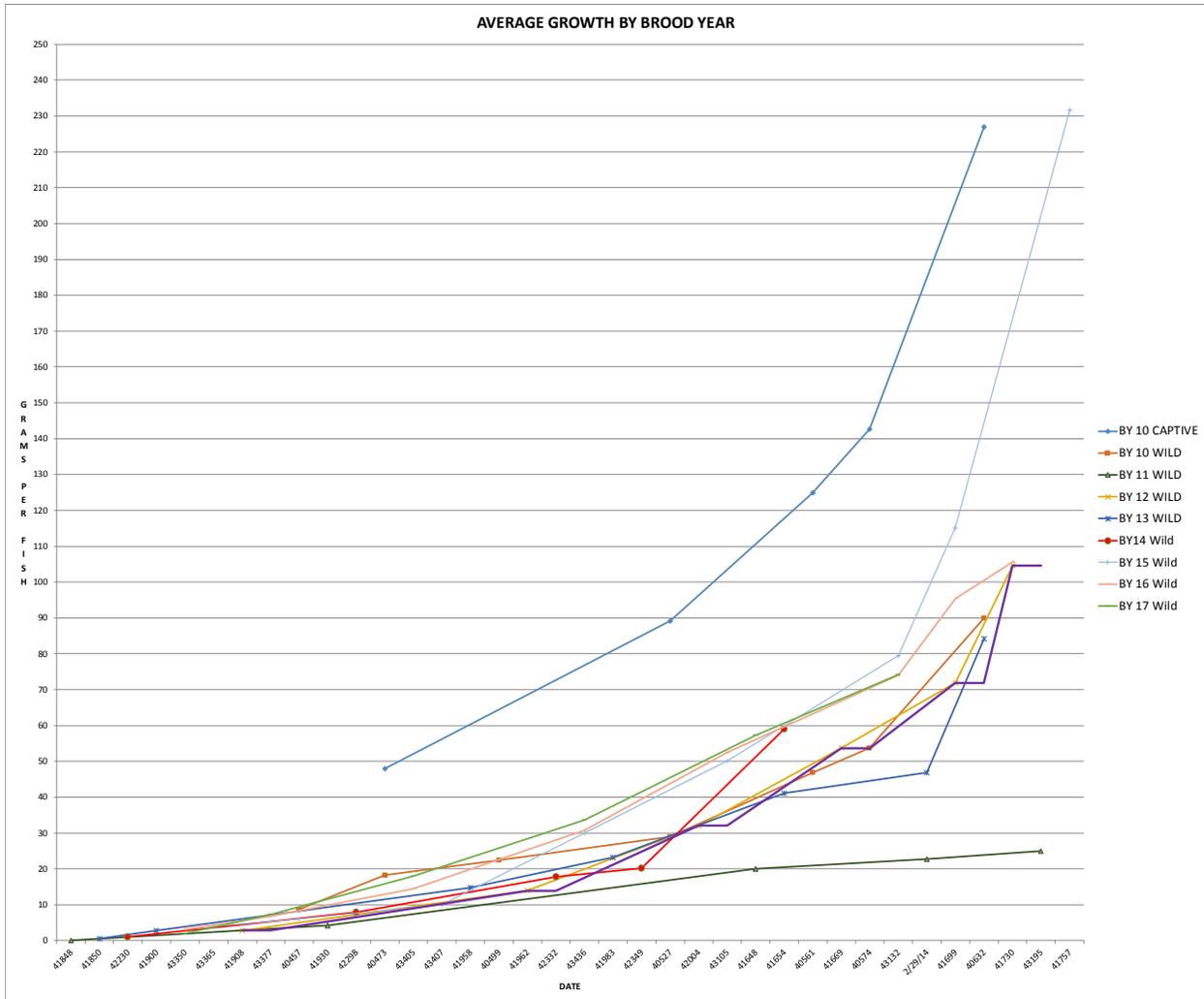
Tracy Hillman summarized the proposed approach as follows: Grant PUD commits to trap adult lamprey for 15 days (not weekends) during the peak period of the adult lamprey run. Grant PUD would maximize the number of adults trapped, with the assumption that catch is positively correlated to effort. Additional trapping could occur before or after the proposed three-week trapping period, but those efforts would be funded by other entities (e.g., Chelan and/or Douglas PUD). Tracy asked members present if this accurately represented the draft proposal. Members indicated it did. Mike will discuss the draft proposal internally and report back to the PRFF in March. The PRFF will revise the draft SOA during the March PRFF meeting.

- D. **Other Pacific Lamprey Items** – Pat Wyena shared some of his thoughts on supplementation and translocation of Pacific lamprey in the basin. He stated his concern with the lack of effort to restore natural populations of lamprey. He said they are an important cultural resource to Wanapum and there has been little discussion about improving habitat for natural populations. Tracy and Bob described some of the habitat efforts occurring through other programs and the benefits of translocation. Pat would like to see more discussion about restoring natural populations in the future.

VIII. Next Meeting: 7 March 2018 – Grant PUD Natural Resources Wenatchee Office

Attachment 1

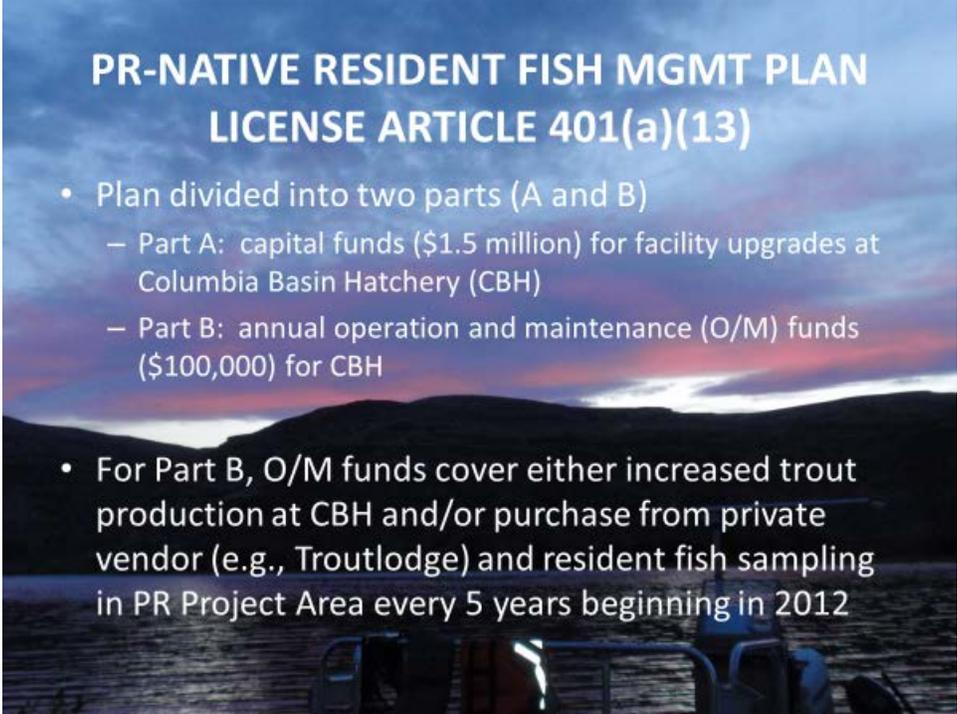
Figure Showing Growth of Juvenile Sturgeon at Marion Drain Compared with Previous Years (Figure from Donella Miller, YN)



Attachment 2

Presentation by Dave Burgess on Resident Fish Surveys Conducted in the Priest Rapids Project Area in 2017





PR-NATIVE RESIDENT FISH MGMT PLAN LICENSE ARTICLE 401(a)(13)

- Plan divided into two parts (A and B)
 - Part A: capital funds (\$1.5 million) for facility upgrades at Columbia Basin Hatchery (CBH)
 - Part B: annual operation and maintenance (O/M) funds (\$100,000) for CBH
- For Part B, O/M funds cover either increased trout production at CBH and/or purchase from private vendor (e.g., Troutlodge) and resident fish sampling in PR Project Area every 5 years beginning in 2012



PR-NATIVE RESIDENT FISH MGMT PLAN LICENSE ARTICLE 401(a)(13)

- Resident Fish Surveys:
 - Begin in 2012, to meet 2013 reporting deadline
 - Resident fish sampling must occur between August 1st through October*. Temperature dependent.
 - Both Priest and Wanapum Reservoirs will be sampled

Developing Sampling Regime

- Pfeifer et al. 2000 to serve as baseline
- Utilize resident fish data collected during 2009-2010 PR anadromous salmonids/predator interactions study (WDFW-LLRT/USGS)
 - Sampled both Priest and Wanapum Reservoirs
 - 300+ sample sites located throughout PR Project Area for a total EF effort of ~187,800 seconds (52.2 hours)
 - 29,840 fish collected during study (~30 species)

Methods and Analysis 2012 & 2017

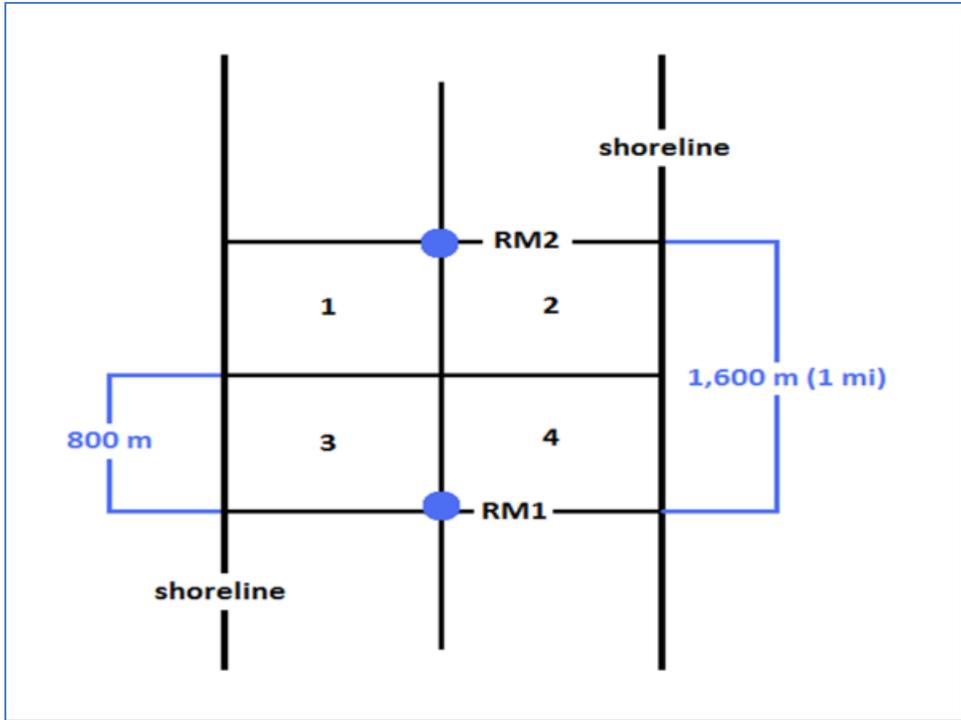
- Boat Electrofishing 40 sites selected within the Priest Rapids Project. Priest Rapids Dam to Rock Island Tailrace
- Fish collected were identified, weighed (g) and measured (mm).
 - Analysis of data and Development of indices Catch per unit effort (CPUE), mean length, biomass, condition factor (K), species composition, indices of biotic integrity (IBI), relative weight (W_r)

Indices

- CPUE: # of fish per unit time
- Mean Length: mean length of each species
- IBI: The IBI is designed to assess biotic integrity directly through attributes of fish communities in streams (Fausch et al. 1984).
 - Each metric receives a score of either 1, 3, or 5
 - For example: total number of native species (0-4 spp is a score of 1 or worst; 5-9 spp is a score of 3; 10+ spp is a score of 5 or best)

Indices

- W_r : the ratio of the actual weight of a fish to what a rapidly growing fish of the same length should weigh (W_s). Represented around a line at 100%
- K: Weight to length relationship.
- Biomass: (wt of species / total wt.) * 100
- Species Composition: (# of 1 species / # all species) * 100





Results & Discussion

Species comp

- 2009-10: Largescale Sucker 35.23%, NPM 16.22%
- 2012: Redside Shiner 27.35%, NPM 24.65%
- 2017: Largescale Sucker 33.98%, Redside shiner / NPM 14.9%

Biomass

- All years Largescale Suckers represented over 70% of biomass from contacted fish

CPUE (fish/hr.)

	Largescale Sucker	NPM	Redside Shiner
2009-10 (256)	90.3	41.5	37.7
2012 (300)	44.5	73.9	82.0
2017 (619)	211.2	92.6	92.9

Survey Year	Score and (Value)			
	1999	2009–2010	2012	2017
<i>Species richness and composition</i>				
Total number of native species	5 (20)	5 (21)	5 (15)	5 (12)
Number of cottid species	1 (1)	1 (1)	1 (1)	1(1)
Number of native cyprinid species	5 (7)	5 (7)	3 (5)	5(6)
Number of catostomid species	5 (3)	5 (4)	5 (4)	5(3)
Number of intolerant species	5 (9)	5 (9)	5 (5)	5(4)
% of individuals as common carp	5 (<1)	5 (<1)	5 (<1)	5 (<1)
<i>Trophic composition</i>				
% of individuals as omnivores	3 (35.8)	3 (44.7)	5 (20.6)	3 (35.8)
% of individuals as insectivores	5 (43.6)	3 (28.5)	5 (45.5)	5(40.3)
% of individuals as catchable salmonids ¹	1 (<1)	1 (<1)	1 (<1)	1(<1)
<i>Fish abundance and condition</i>				
Number of individuals	5 (9,554)	5 (22,288)	5 (2,000)	5(4,135)
% of individuals introduced (exotic)	3 (2.6)	3 (6.2)	3 (4.4)	3 (4.3)
% of individuals with anomalies ²	5 (<1)	5 (<1)	5 (<1)	5(<1)
Total IBI Score	48	46	48	48
Class	Good	Good–Fair	Good	Good

–The IBI Scale (Hughes and Gammon 1987)

- Excellent (57-60)
- Good (48-52)
- Fair (39-44)
- Poor (28-35)
- Very Poor (≤ 23)

Future Work

- Repeat resident fish survey in 2022
- Monitor all indices and test for change.
- Work with co-managers and implement management actions if desired.
- Modify IBI model to be specific to PR Project.

QUESTIONS OR COMMENTS??

