

# Bull Trout Restoration and Monitoring Project



Yakama Nation Fisheries: Russ Byington & Todd Newsome

# Bull Trout Rescue, Rear, and Release 2017-2024





# YN Rescue - Rear – Release 2019-2024

<u>Gold Creek</u>			
YEAR	YOY Transferred	Released	Survival
2019	108	78	72%
2020	64	63	98%
2021	86	84	98%
2022	98	97	99%
2023	34	34	100%
2024	0	0	n/a
<b>Total Fish</b>	<b>390</b>	<b>356</b>	

<u>Kachess River</u>			
YEAR	YOY Transferred	Released	Survival
2019	1162	152	13%
2020	596	531	89%
2021	483	466	96%
2022	0	0	n/a
2023	107	100	93%
2024	57		
<b>Total Fish</b>	<b>2405</b>	<b>1249</b>	

Fry Arrive in August

Rear 10 months

Release in Early Summer

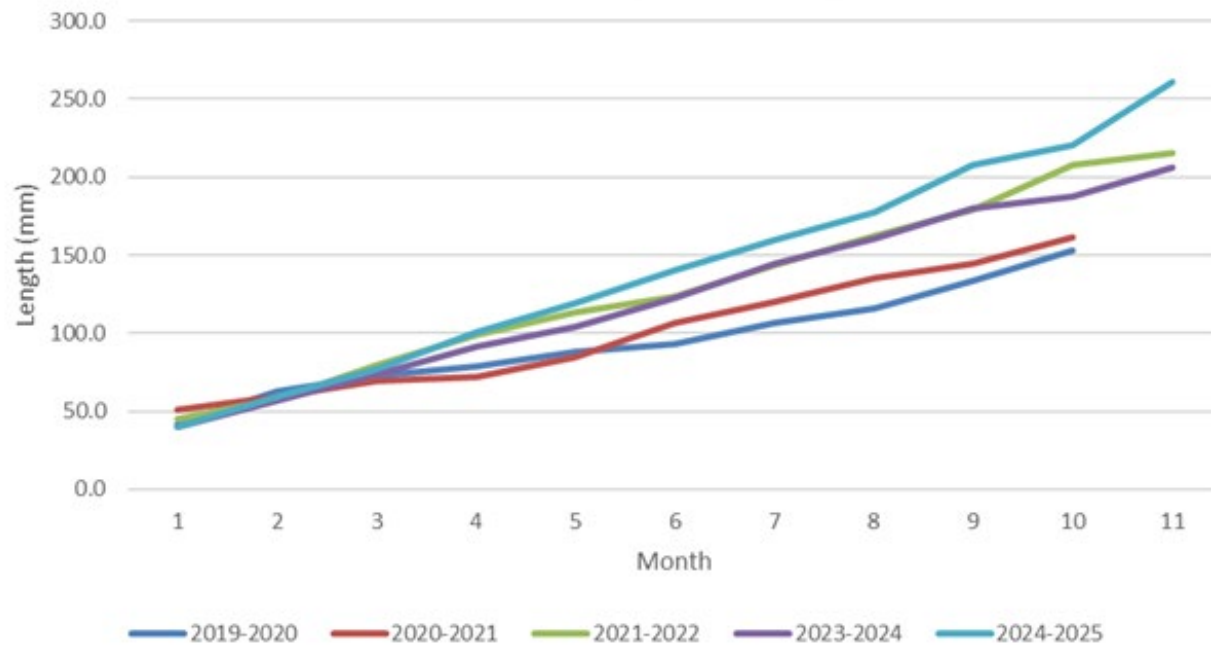


1,605 Juveniles Released

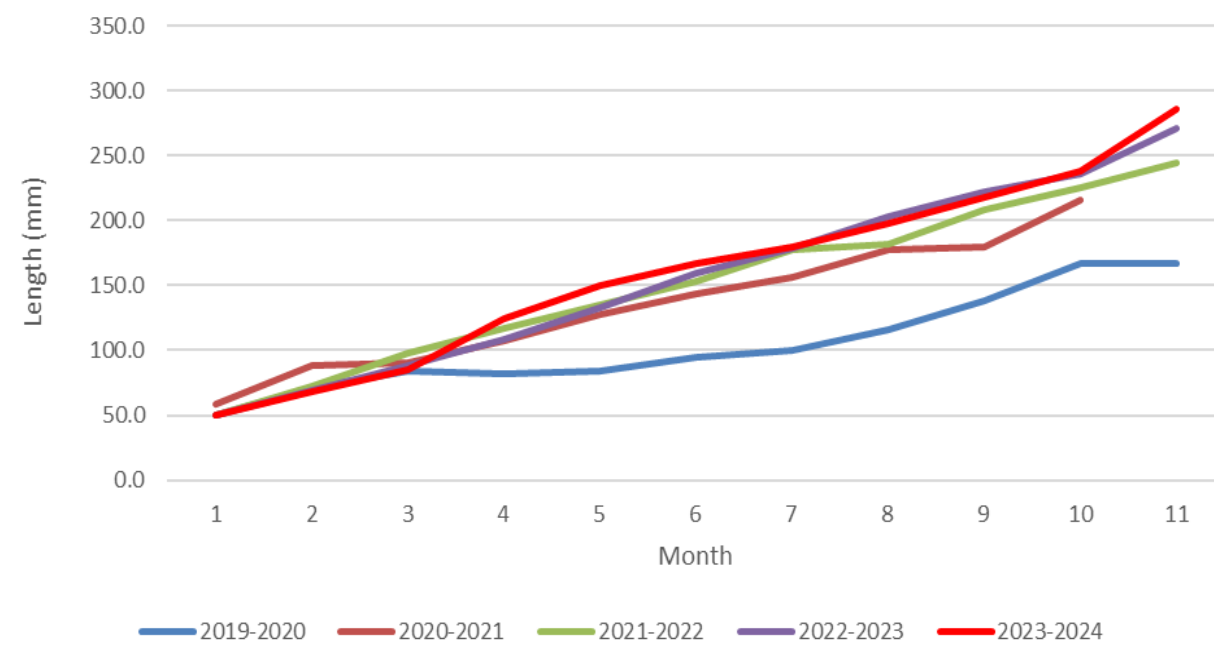
# Adaptive Management

- Condensed Rescue & Transport Period
- Reduced Density
- Increase Feed Frequency
- 10 Month Rearing Cycle

Kachess River Captive Rearing



Gold Creek Captive Rearing





# Extended Captive Rearing

- Reared an extra year
- 412mm average length
- Ultrasound
- Potential Broodstock

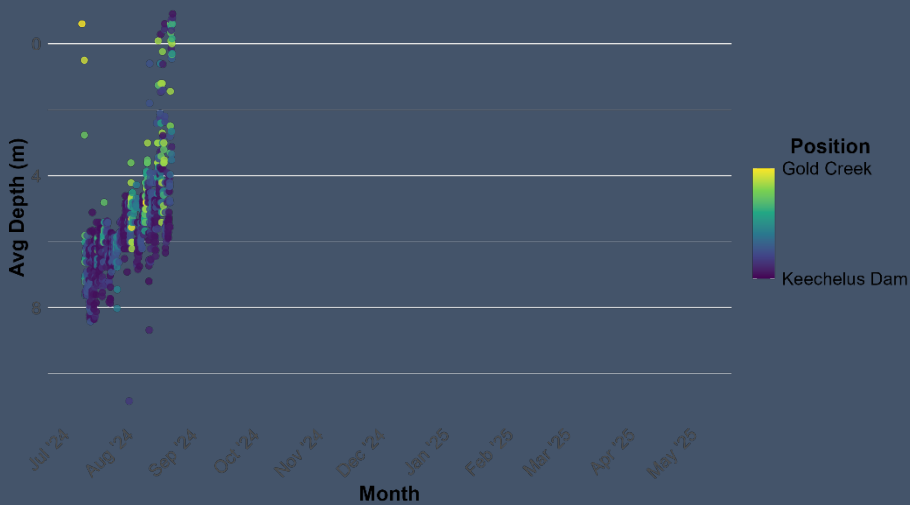


# Hydroacoustic Monitoring

Hourly Avg Depth – 3DD.003D481253



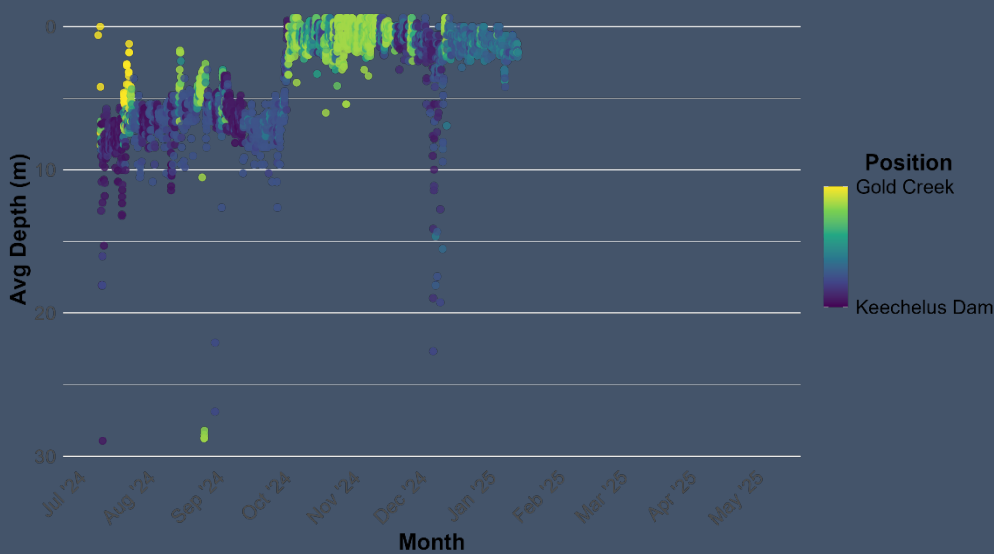
Hourly Avg Depth – 3DD.003D481229



Provided by USFWS

PIT Tag ID	Fork Length (mm)	Total Length (mm)	Avg Depth (m)	# Detections	Days
3DD.003D481229	430	450	5.53	9,903	45
3DD.003D481236	397	420	3.95	46,979	297
3DD.003D481253	440	460	3.37	15	4
3DD.003D481257	410	440	4.31	36,915	289
3DD.003D481267	384	400	5.37	77,611	294
3DD.003D481274	410	425	3.78	31,410	190

Hourly Avg Depth – 3DD.003D481274



# 2024 LaSalle PIT Detections

2024 LaSalle Detections by Release Year					
<u>Site</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
G90	3	5	2	1	0
Upper Gold	1	0	0	0	0
Keechelus Dam	2	6	1	4	5
Upper Kachess	1	0	2	0	0
Lower Kachess	1	2	5	0	0
Box Canyon	1	7	10	0	8
Narrows	1	2	5	0	0

75 Detections





# 2024 Keechelus Reservoir Detections

Multiple detections below Dam

Spawning unknown

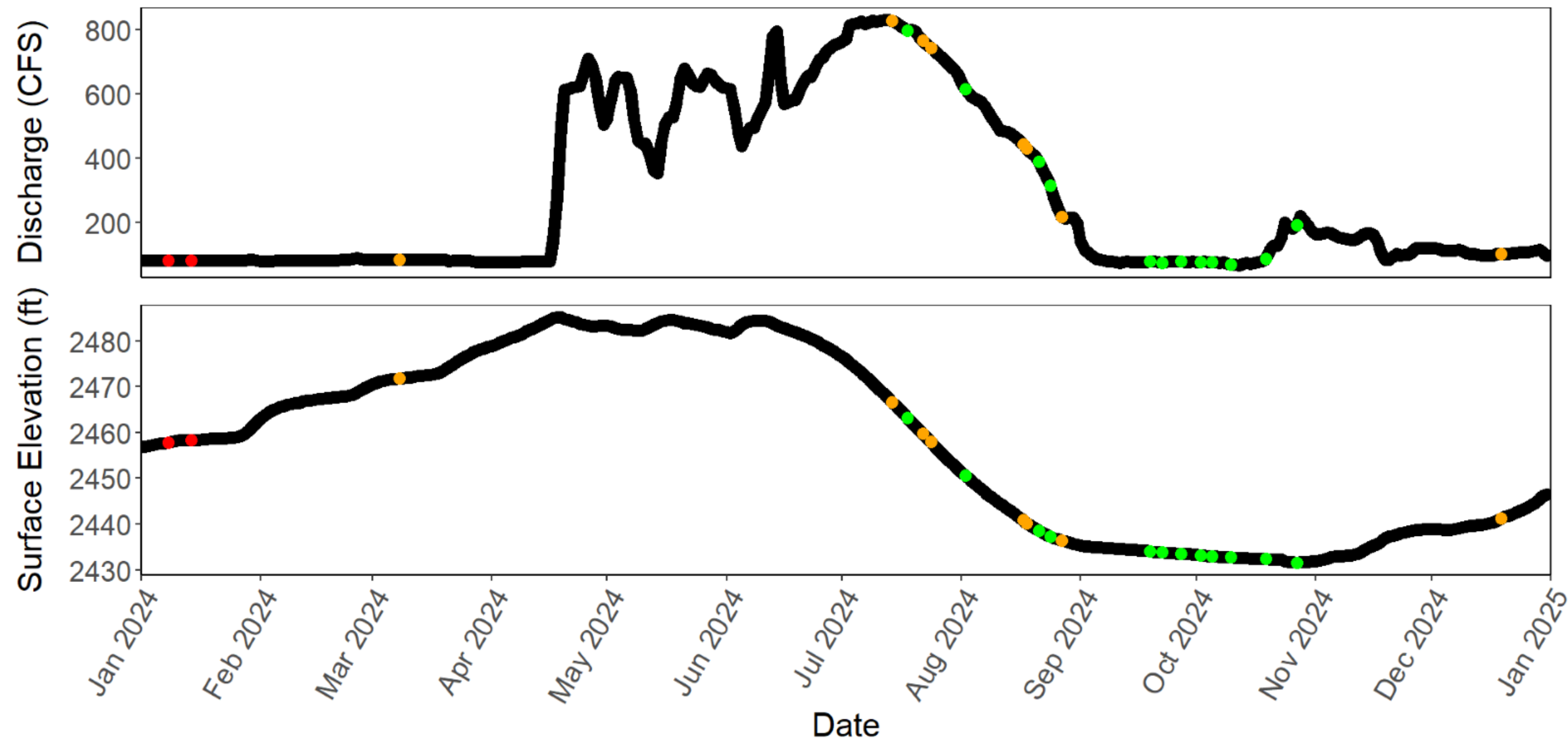
1 adult at Upper Gold



2024 Keechelus Reservoir Detections					
<u>PIT Tag</u>	<u>Origin</u>	<u>Release Year</u>	<u>Brood Year</u>	<u>Antenna</u>	<u>2024 Detection Month</u>
3DD.003D481187	LaSalle-Gold Creek	2021	2020	G90	June
3DD.003D4811AC	LaSalle-Gold Creek	2021	2020	G90	Sept
3DD.003D5A415E	LaSalle-Gold Creek	2023	2022	G90	July & Sept
3DD.007749399B	LaSalle-Gold Creek	2020	2019	G90	June
3DD.00779191E3	LaSalle-Gold Creek	2021	2020	G90	Aug & Sept
3DD.007791ABB0	LaSalle-Gold Creek	2021	2020	G90	Aug & Sept
3DD.007791AC82	LaSalle-Gold Creek	2021	2020	G90	Sept
3DD.0077925D53	LaSalle-Gold Creek	2021	2020	G90	Aug & Sept
3DD.0077928A18	LaSalle-Gold Creek	2021	2020	G90	Sept
3DD.0077CDCF98	LaSalle-Gold Creek	2020	2019	G90	July
3DD.0077CE2E3A	LaSalle-Gold Creek	2020	2019	G90	June & Aug
3DD.003D481229	LaSalle-Gold Creek	2024	2022	Keechelus Dam	Aug & Sept
3DD.003D481269	LaSalle-Gold Creek	2024	2023	Keechelus Dam	July - Sept
3DD.003D5A415B	LaSalle-Gold Creek	2023	2022	Keechelus Dam	July
3DD.003D5A4174	LaSalle-Gold Creek	2023	2022	Keechelus Dam	July & Aug
3DD.007749399B	LaSalle-Gold Creek	2020	2019	Keechelus Dam	Aug & Sept
3DD.007791E8A2	LaSalle-Gold Creek	2021	2020	Keechelus Dam	Aug
3DD.00779210C8	LaSalle-Gold Creek	2021	2020	Keechelus Dam	Aug & Sept
3DD.0077928A18	LaSalle-Gold Creek	2021	2020	Keechelus Dam	Sept
3DD.0077D2F972	LaSalle-Gold Creek	2020	2019	Keechelus Dam	July
3DD.0077CDCF98	LaSalle-Gold Creek	2020	2019	Upper GC	June & July
3DD.003D481238	LaSalle-Gold Creek	2024	2023	Keechelus Dam	October



● Antenna Operation ● Fish Entrained – Year Unknown ● Entrained in 2024 ● Entrained before 2024



# 2024 Kachess Reservoir Detections

Multiple detections in Box Canyon & Kachess River

Spawning likely in Kachess River

Spawning possible in Box Canyon



2024 Kachess Reservoir Detections					
PIT Tag	Origin	Release Yr	Brood Yr	Antenna	2024 Detections
3DD.003D5A4227	LaSalle-Kachess	2024	2023	Box Canyon	July
3DD.003D5A4240	LaSalle-Kachess	2024	2023	Box Canyon	July
3DD.00779241F9	LaSalle-Kachess	2021	2020	Box Canyon	10/9
3DD.003D4811E2	Wild Kachess Adult	2023	n/a	Box Canyon	10/11
3DD.00774A1876	LaSalle-Kachess	2020	2019	Narrows	10/12 & 10/16
				Lower Kachess	10/28
3DD.007792536C	LaSalle-Kachess	2021	2020	Box Canyon	10/19-10/23
				Lower Kachess	10/27
3DD.003D481162	LaSalle-Kachess	2021	2020	Box Canyon	10/19-10/27
3DD.0077920035	LaSalle-Kachess	2021	2020	Box Canyon	10/20-10/27
				Lower Kachess	10/28
3DD.003D59D153	LaSalle-Kachess	2022	2021	Box Canyon	10/21 & 11/2-5
				Lower Kachess	10/28-29
3DD.003D4811A9	LaSalle-Kachess	2022	2021	Box Canyon	10/5-10/21 & 10/30
				Lower Kachess	10/28-29 & 11/5-6
3DD.0077931FEB	LaSalle-Kachess	2021	2020	Box Canyon	10/21
3DD.003D5A3FBD	LaSalle-Kachess	2022	2021	Box Canyon	10/21-10/29
3DD.003D48119F	LaSalle-Kachess	2022	2021	Box Canyon	10/22-10/26
3DD.003D481194	LaSalle-Kachess	2022	2021	Box Canyon	10/19 & 10/23
				Lower Kachess	11/14
3DD.0077927E52	LaSalle-Kachess	2021	2020	Box Canyon	10/25-10/31
3DD.003D4811B9	LaSalle-Kachess	2021	2020	Box Canyon	10/26-10/30
3DD.003D59D8CD	LaSalle-Kachess	2022	2021	Box Canyon	10/27-10/30
3DD.003D481168	LaSalle-Kachess	2022	2021	Box Canyon	10/27-10/28
3DD.003D481177	LaSalle-Kachess	2022	2021	Box Canyon	10/27-11/5
3DD.003D59D792	LaSalle-Kachess	2022	2021	Box Canyon	11/2-3
				Narrows	9/26
				Lower Kachess	10/28 & 11/5
3DD.003D5A442E	LaSalle-Kachess	2022	2021	Box Canyon	11/2-11/3
<b>3DD.00774A62B7</b>	<b>LaSalle-Kachess</b>	<b>2020</b>	<b>2019</b>	<b>Box Canyon</b>	<b>11/5</b>
				<b>Upper Kachess</b>	<b>11/15</b>
3DD.003D4811BA	LaSalle-Kachess	2022	2021	Lower Kachess	10/28
<b>3DD.003D59D149</b>	<b>LaSalle-Kachess</b>	<b>2022</b>	<b>2021</b>	<b>Upper Kachess</b>	<b>11/21</b>
<b>3DD.003D5A4400</b>	<b>LaSalle-Kachess</b>	<b>2022</b>	<b>2021</b>	<b>Upper Kachess</b>	<b>11/22</b>



# Additional Monitoring

## 2024 Monitoring :

- Deployed additional 39 acoustic tags in Keechelus
- Installed permanent Upper Kachess antenna
- Continue tagging rescued juveniles and LaSalle releases





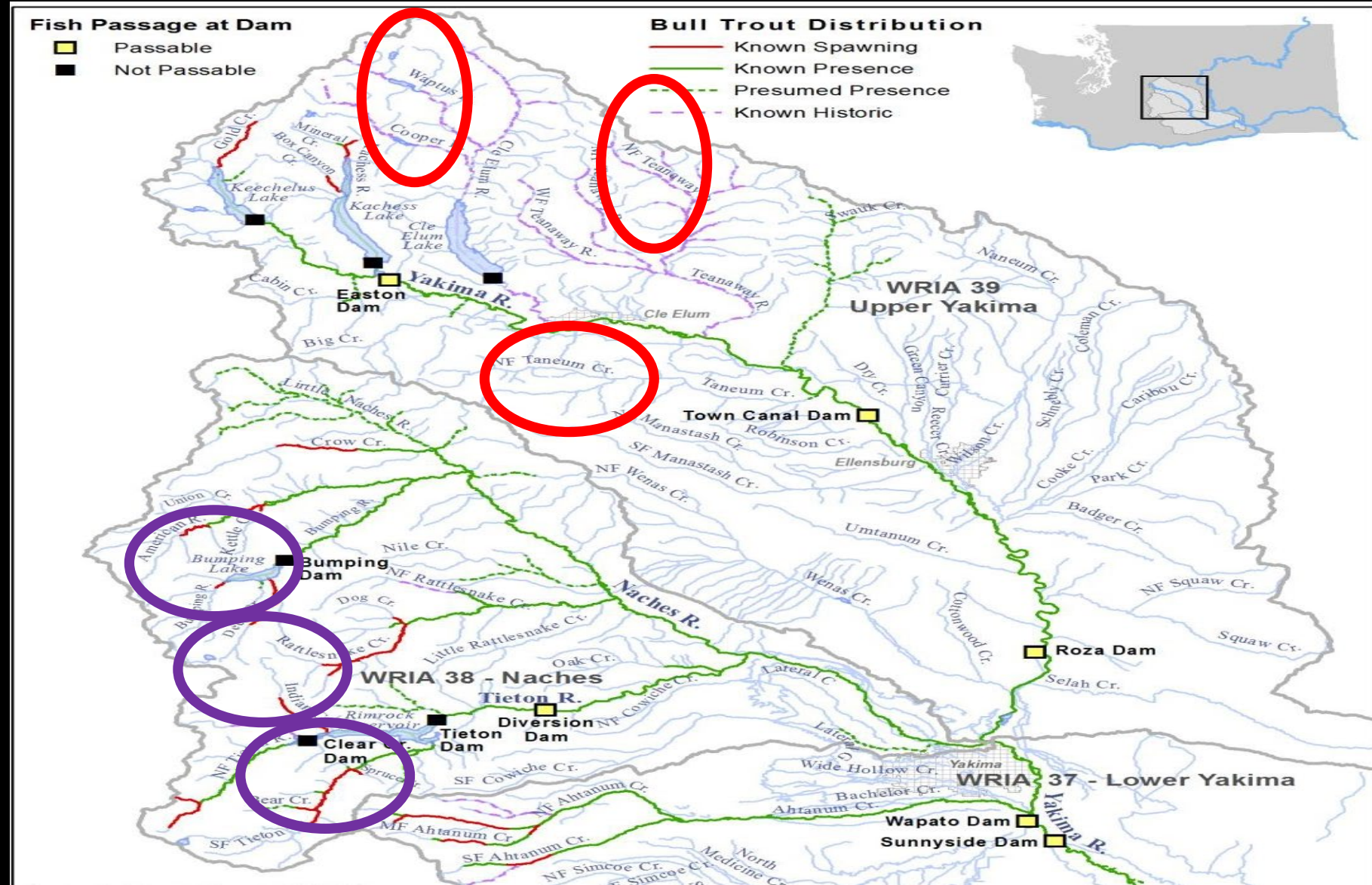
# Bull Trout Reintroduction

## Potential Donor Source

- SF Tieton River
- Indian Creek
- Deep Creek

## Reintroduction Streams

- Taneum Creek
- NF Teanaway River
- Waptus River



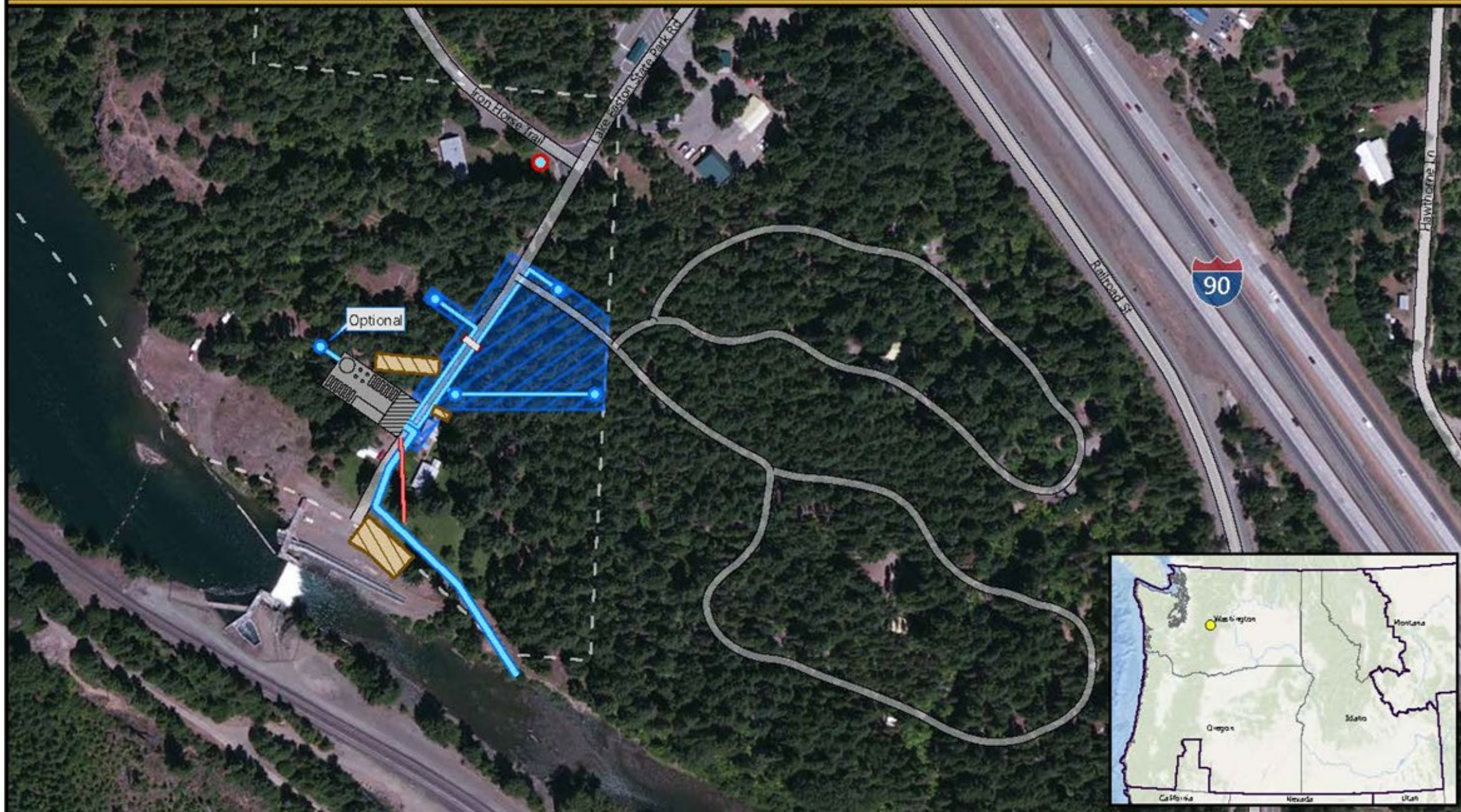




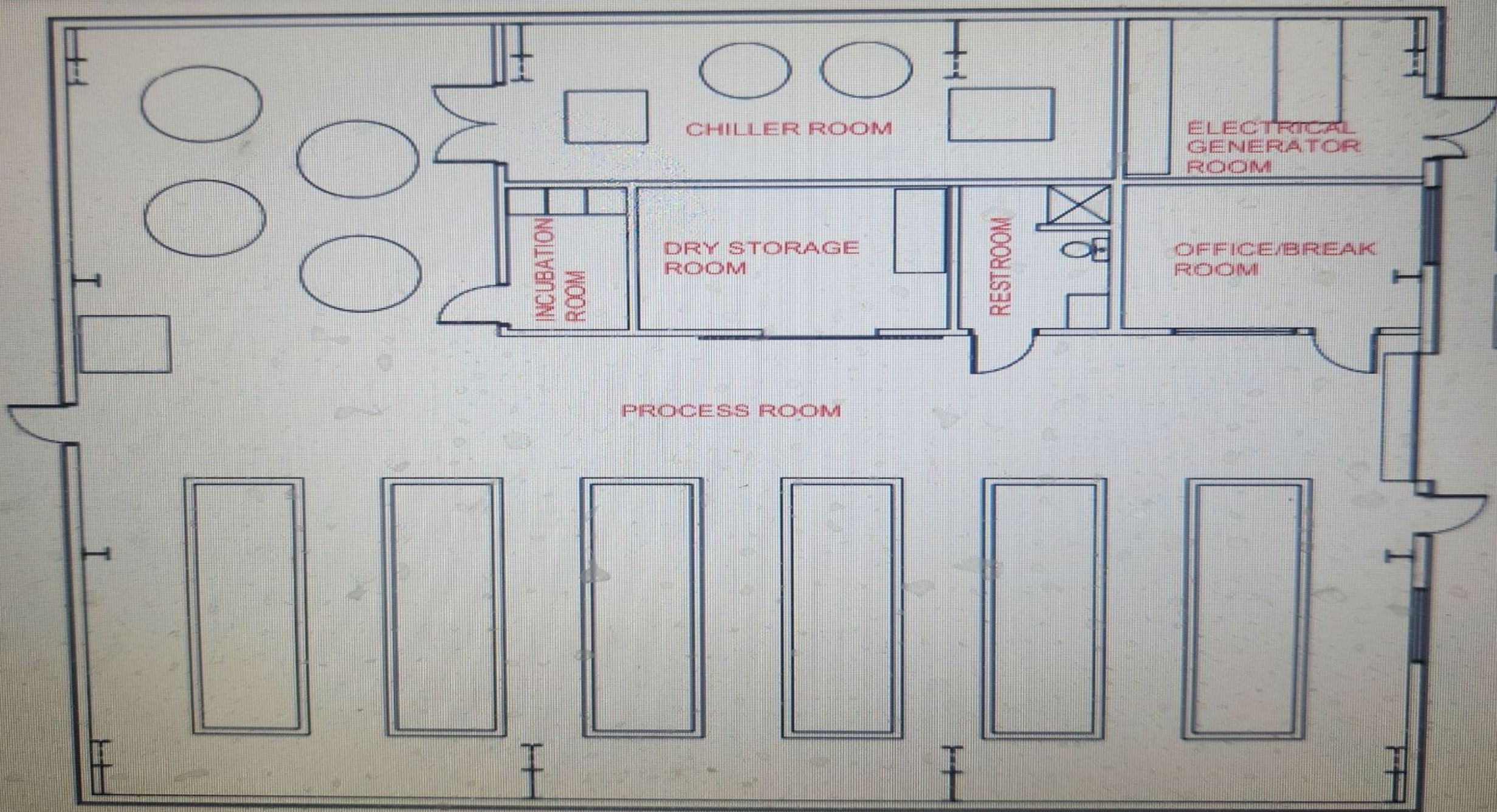
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# EASTON RESEARCH FISH FACILITY

Yakima Project - Kittitas County, WA











Washington  
Department of  
**FISH and  
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# Questions?



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