

Sport Fish Hatchery Facility Upgrades and Improvements - FY2020 Request: \$1,500,000
William Jack Hernandez and Ruth Burnett Reference No: 46468

AP/AL: Appropriation **Project Type:** Renewal and Replacement
Category: Natural Resources
Location: Statewide **House District:** Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40) **Contact:** Dave Rutz
Estimated Project Dates: 07/01/2019 - 06/30/2024 **Contact Phone:** (907)267-2150

Brief Summary and Statement of Need:

This project will design and implement improvements to the state's Sport Fish Hatcheries worth more than \$150M that ensures facility sustainability and operation safeguards that protect the current production of enhanced fish that support vital sport fishing opportunities. More specifically, the projects would allow the William Jack Hernandez Sport Fish Hatchery (WJHSFH) in Anchorage to properly design and construct a formal egg-take platform and effluent treatment and discharge system modifications to comply with EPA standards per issued permit. Similarly in Fairbanks, the project would design and install a second backup production well at the Ruth Burnett Sport Fish Hatchery in event of a primary well failure.

Funding:	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
1024 Fish/Game	\$1,500,000						\$1,500,000
Total:	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$1,500,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Prior Funding History / Additional Information:

Sec1 Ch19 SLA2018 P5 L19 SB142 \$1,500,000
 Sec63 Ch29 SLA2008 P223 L5 SB221 \$70,640,000

Project Description/Justification:

William Jack Hernandez Sport Fish Hatchery (WJHSFH)-Anchorage
Project 1 of 2: EGG-TAKE STATION IMPROVEMENTS:

Line Item	FY2020	FY2021	Comments
L1000	\$0.00	\$0.00	
L2000	\$0.00	\$0.00	
L3000	\$100,000.0	\$250,000.0	Design/build contracts
L4000	\$0.00	\$0.00	
L5000	\$0.00	\$0.00	

Egg-takes are an important element to the operation of any hatchery facility, and the WJHSFH conducts them at various times of the year depending on the species. Since its completion in 2011, both the WJHSFH and associated Ship Creek Fisheries Center (SCFC) have observed a steady increase in public visitation. That being said, the area where this activity takes place at the WJHSFH was never designed or constructed to accommodate crowds gathering to observe the egg-take process. Further, the needs for adequately and safely accommodating staff were not fully realized and are now creating unsafe situations.

Properly designing and constructing a formal egg-take platform at the WJHSFH will not only greatly enhance fish handling and sampling areas for staff but will provide a more secure environment for the public observing active Chinook and Coho egg-takes being performed by staff. Furthermore, a properly designed and constructed platform will greatly reduce the potential for injuries to staff by eliminating ground obstructions, uneven terrain and slippery substrates when wet.

WJHSFH Effluent Treatment and Discharge System Modifications

Line Item	FY2020	FY2021	Comments
L1000	\$0.00	\$0.00	
L2000	\$0.00	\$0.00	
L3000	\$250,000.00	\$500,000.00	Design/Construction contracts
L4000	\$0.00	\$0.00	
L5000	\$0.00	\$0.00	

The WJHSFH has operated since 2011 with no measured biological impact on adjacent Ship Creek (the receiving water for the facilities effluent discharge). Recently however, waterfowl that frequent the facility’s concentrated effluent settling pond to rest/feed deposit feces which is contributing to higher than acceptable concentrations of fecal coliform bacteria in the discharge into Ship Creek. This occurs during certain times of the year and tends to happen more in winter months when ice covers open water areas and the waterfowl concentrate into the Ship Creek area as it is ice-free. High counts cause the facility to be temporarily out of compliance with Federal (EPA) water quality standards. To fully address this situation the Division of Sport Fish will need to design and construct improvements to this system to address this and future issues that may arise regarding effluent discharge from the settling pond into Ship Creek.

**Ruth Burnett Sport Fish Hatchery (RBSFH)-Fairbanks
 COST OF IMPROVMENTS BY LINE ITEM:**

Line Item	FY2020	FY2021	Comments
L1000	\$0.00	\$0.00	
L2000	\$0.00	\$0.00	
L3000	\$400,000.00	\$0.00	Design Phase Only
L4000	\$0.00	\$0.00	
L5000	\$0.00	\$0.00	

Unlike most fish hatcheries around the state, which use surface waters to support operations, the Ruth Burnett Sport Fish Hatchery (RBSFH) relies solely on well water for its production. Given the initial cost associated with construction of the RBSFH, only a single (primary) well was developed offering zero redundancy/backup if the primary were to fail.

The groundwater source that is pumped into the facility contains hydrogen sulfide and high levels of iron and manganese. Beginning in October of 2015 and through January 2016, plumbing at the Ruth Burnett facility was observed to be compromised. Leaks were occurring on main raw water runs, fittings were breaking, and impellers on circulating pumps were crumbling. Although the water source does go through a treatment to reduce these high levels, it does not completely resolve the corrosion issues. Remediation of the plumbing issues occurs on a regular basis and is now part of standard operations. However, should the single primary well fail significant losses of fish will occur and major losses of fishing opportunities could persist for years.

Improvements to this facility with a capital appropriation would complete the installation and incorporation of a second backup production well allowing the water system to automatically respond to a well failure and head off a catastrophic loss of production.