



# Loa Fish Hatchery



Utah Department of Natural Resources

Utah Division of Wildlife Resources

# Fishing is a quality-of-life activity in Utah



In 2018, fishing contributed \$1.1 billion and added 7,562 jobs to Utah's economy. That includes \$626 million that 578,265 anglers spent while fishing in the state.





# Hatchery raised fish are essential

- Increase **angler satisfaction**
- Aid in angler **recruitment and retention** efforts
  - The number of Urban fishing waters continue to increase
  - Community fishing programs are completely dependent on hatchery fish
- A key to **effective fisheries management**
  - Support population management
  - Enable greater aquatic biodiversity



# Loa can be one of the most important hatcheries in Utah

- In **November 2014**, the hatchery was closed due to:
  - Discovery of **New Zealand mud snails**
  - Originally constructed in 1936, the facility is **not capable of being upgraded**
- **Cannot securely raise fish** free from disease or invasive aquatic species
- The volume and quality of water make it an **essential facility to meet future angling needs and desires**
- This priceless asset is **currently inoperable**



# Need to rebuild the hatchery

- Currently operating hatcheries are producing fish in excess of design
  - Production beyond design can cause fish health issues
- Current production not able to meet the demands of fisheries management plans
- Additional fish production necessary for expected human population increase
- Operating hatcheries are scheduled to receive biosecurity upgrades and maintenance through the DWR Hatchery Maintenance account
  - Necessary work but will reduce production capacity

# 2019 feasibility study

DWR and DFCM contracted with Sunrise Engineering for programming and concept design



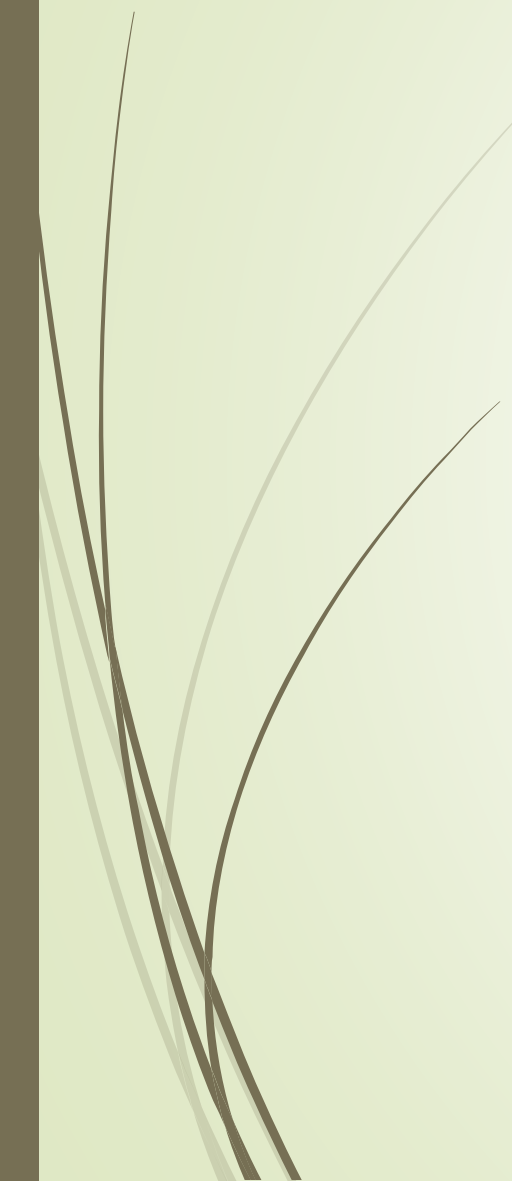
LOA FISH HATCHERY PROGRAMMING AND  
CONCEPT DESIGN

LOA, UTAH

**DRAFT**



# A new Loa Hatchery

- A new facility with **modern equipment, materials and design** will:
    - Produce **350,000 pounds** of fish annually
    - Be the most **productive and cost effective** hatchery in Utah
    - Have a **secure** water source, hatchery building and raceways
  - Fish will be **free from disease and aquatic invasive species**
  - Other hatcheries will be able to operate at designed production levels
  - DWR will be able to meet the needs of current and future anglers
  - Hatcheries will satisfy the requirements for **healthy fisheries management**
- 



# Cost to rebuild the hatchery

Total cost estimate: \$33,892,166

Code	Program			Total Program NASF	Circulation Factor	Program Dept. GSF	Building Factor	Program GSF	Cost/ GSF	Estimated Construction Cost	
<b>Categories</b>											
A	Springwater Collection			NA	NA	NA	NA	NA	NA	\$ 301,218.00	
B	Pump Station			250.00	1.00	250.00	1.00	250.00	\$1,240.00	\$ 310,000.00	
C	Degasser			256.00	1.00	256.00	1.00	256.00	\$ 761.59	\$ 194,968.00	
D	Hatchery			8200.00	1.10	9020.00	1.15	10373.00	\$ 444.68	\$4,612,694.60	
E	Office & Shop			4280.00	1.33	5692.40	1.15	6546.26	\$ 259.15	\$1,696,444.93	
F	Feed Storage			2000.00	1.10	2200.00	1.10	2420.00	\$ 180.00	\$ 435,600.00	
G	Raceway			65725.00	1.10	72297.50	1.15	83142.13	\$ 99.77	\$8,294,770.00	
H	Disinfection Station			920.00	1.00	920.00	1.15	938.00	\$ 178.00	\$ 61,184.00	
J	Wastewater Treatment			11349.00	1.00	11349.00	1.14	12909.00	\$ 229.48	\$2,962,380.32	
K	Truck Parking			1600.00	1.00	1600.00	1.15	1840.00	\$ 180.00	\$ 331,200.00	
L	House			5400.00	1.00	5400.00	1.15	6210.00	\$ 160.00	\$ 993,600.00	
M	Generator			256.00	1.00	256.00	1.00	256.00	\$ 331.91	\$ 84,968.00	
N	Process Water			NA	NA	NA	NA	144.00	NA	\$ 814,700.64	
O	Oxygen			NA	NA	NA	NA	400.00	NA	\$ 408,000.00	
P	French Drain			NA	NA	NA	NA	144.00	NA	\$ 447,200.64	
Q	Culinary			NA	NA	NA	NA	0.00	NA	\$ 127,200.00	
R	Demolition			NA	NA	NA	NA	0.00	NA	\$1,034,193.00	
S	Site			NA	NA	NA	NA	0.00	NA	\$2,558,812.50	
Construction cost 2020											
<b>Building Total</b>				<b>100,236</b>	<b>1.09</b>	<b>109,241</b>	<b>1.15</b>	<b>125,828</b>	<b>\$204</b>	<b>\$25,669,135</b>	
Inflation allowances if project is built beyond 2020											
										8.00% Construction cost 2021	\$27,722,665
										8.00% Construction cost 2022	\$29,940,479
										8.00% Construction cost 2023	\$32,335,717
										6.00% Construction cost 2024	\$34,275,860
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# Immediate need

LOA HATCHERY PROGRAMMING – Site prep	
Demolition	\$ 1,034,193
Spring Development	\$ 301,218
Spring Bypass Piping/Overflow	\$ 450,000
1 House & Garage	\$ 496,800
Estimated Phase 1 Construction Cost	\$ 2,282,211
Hazardous Material Abatement	\$ 120,000.00
Furnishings, Fixtures & Equipment	\$ 30,000
Construction Contingency 5.0%	\$ 114,111
Professional Fees 8.37%	\$ 191,021
Estimated Soft Costs	\$ 305,132
Estimated Total Project Costs	\$ 2,587,343

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Thank you. Questions?

