# Lake Mead Fish Hatchery
# CRAB Meeting 2020

NEVADA
DEPARTMENT OF
WILDLIFE

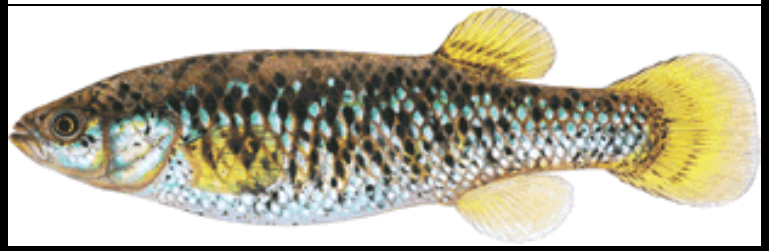
# Fish Reared at LMFH

**Razorback Sucker**
**(*Xyrauchen texanus*)**

**Bonytail**
**(*Gila elegans*)**

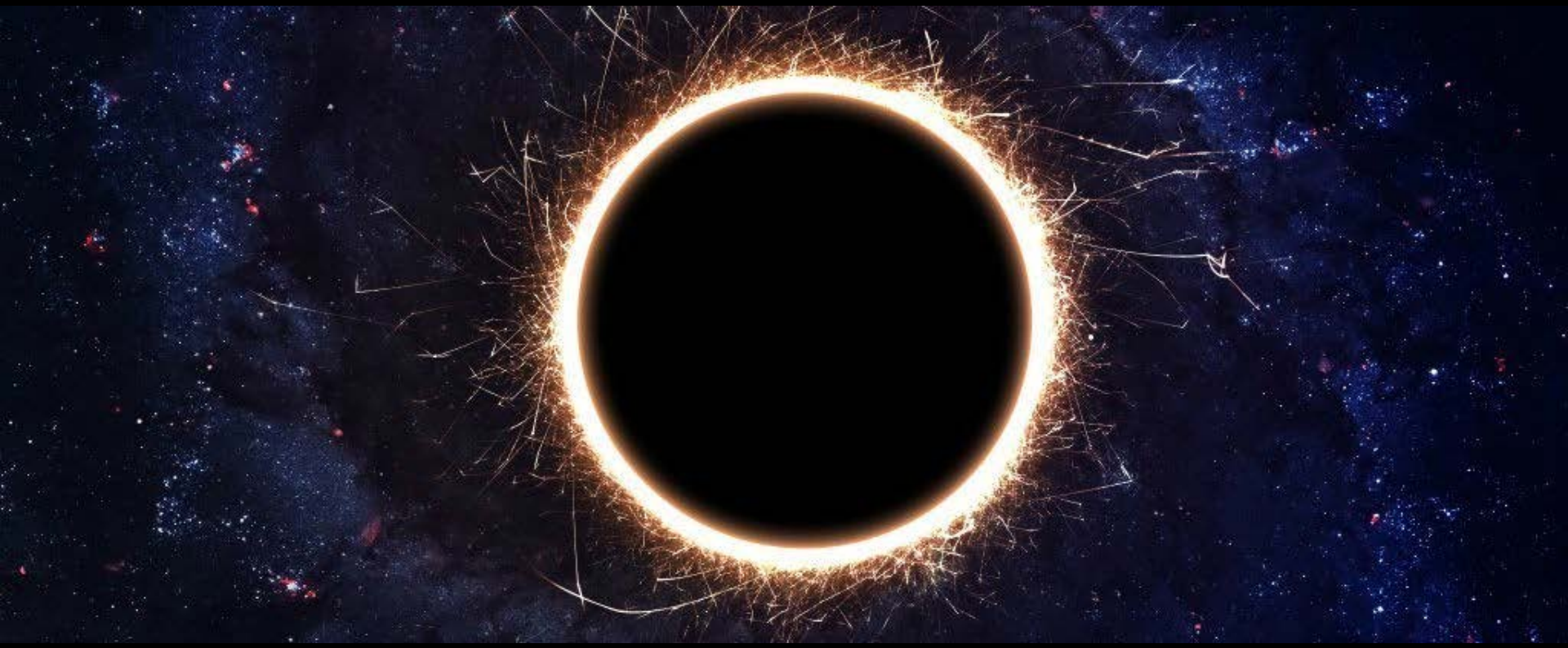
**Flannelmouth Sucker**
**(*Catostumus latipinnis*)**

**Moapa Dace**
**(*Moapa coriacea*)**



**Pahrump Poolfish**
**(Empetrichthys latos)**

Government Shutdown



Personnel Shift

# LMFH Razorback Sucker on Station

| Tank | Year Class | Origin | Number of Fish | Avg Length (mm) |
|---|---|---|---|---|
| 201 | 2019 | Lake Mohave | 945 | fingerlings |
| 202 | 2019 | Lake Mohave | 751 | 188 |
| 203 | 2019 | Lake Mohave | 3,894[1] | fingerlings |
| 204 | 2019 | Lake Mohave | 858[1] | fingerlings |
| 404 | 2017 | Lake Mohave | 627 | 341 |
| 407 | 2017 | Lake Mohave | 798 | 345 |
| 803 | 2017 | Lake Mohave | 945 | 394 |
| 804 | 2017 | Bubbling Ponds | 2,326 | 299 |
| 806 | 2017 | Lake Mohave | 867 | 405 |
| 813 | 2018 | Lake Mohave | 1,050 | 264[2] |
| 814 | 2016 | Lake Mohave | 1,116 | 419 |
| 815 | 2019 | Yuma Backwater | 2,767 | 152 |
| 816 | 2017 | Lake Mohave | 1,042 | 425 |
| 817 | 2017 | Bubbling Ponds | 1,179 | 345 |
| 818 | 2018 | Lake Mohave | 622 | 371 |
| 819 | 2018 | Lake Mohave | 1,625 | 303 |
| 820 | 2017 | Lake Mohave | 783 | 388 |
| | Total Fish | ~12,979 A/9,215 Y | | |

# LMFH Bonytail on Station

| Tank | Year Class | Origin | Number of Fish | Avg Length (mm) |
|---|---|---|---|---|
| 301 | 2015 | SNARRC | 1026 | 297 |
| 409 | 2017 | Achii Hanyo | 1785 | 339 |
| 410 | 2017 | Achii Hanyo | 1096 | 256 |
| 801 | 2014 | Achii Hanyo | 186 | 442 |
| 802 | 2018 | SNARRC | 3417 | 196 |
| 805 | 2018 | SNARRC | 3303 | 192 |
| 807 | 2013 | Wahweap | 3657 | 288 |
| 808 | 2018 | SNARRC | 4472 | 194 |
| | Total Fish | ~18,942 | | |

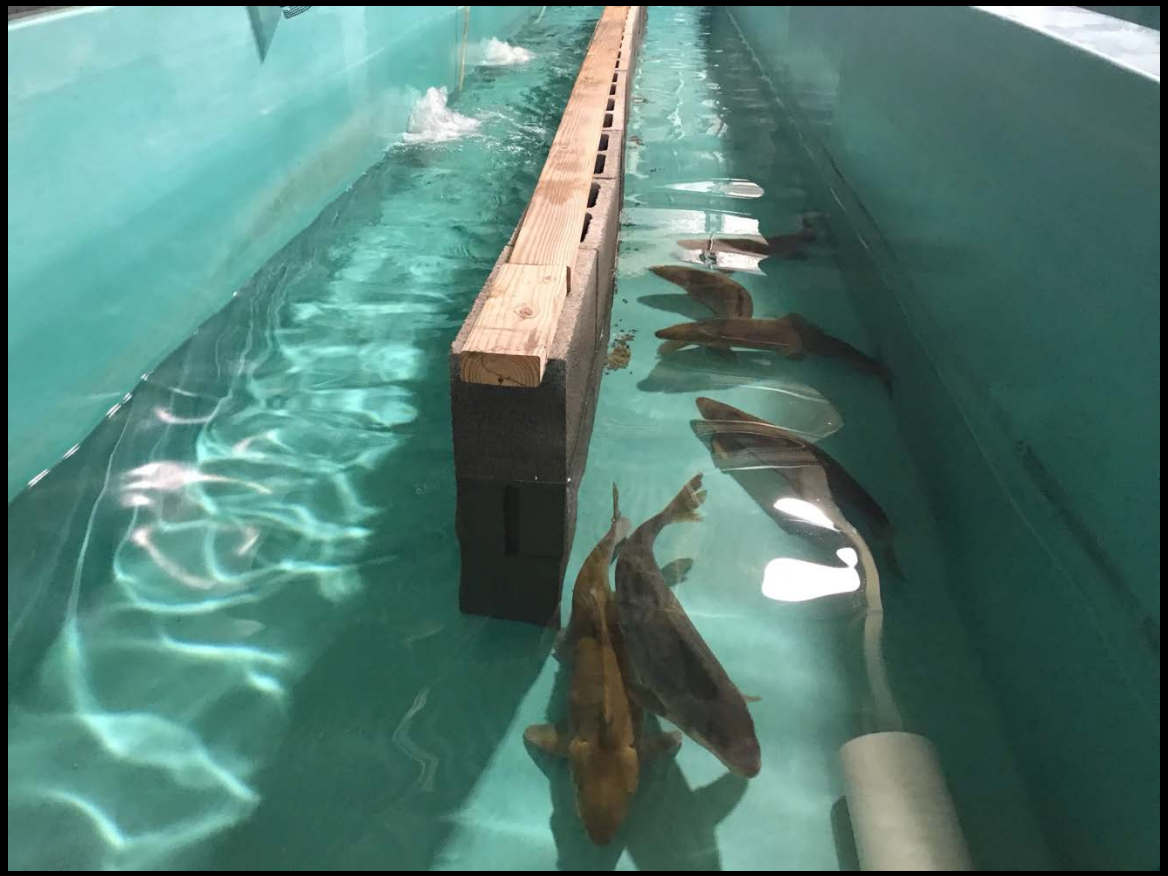
# 2018 Flow Conditioning RZB and BTC

~ 1000 BTC

~ 600 RZB

Fish Conditioned at 42 cm/s for 18 hour intervals.

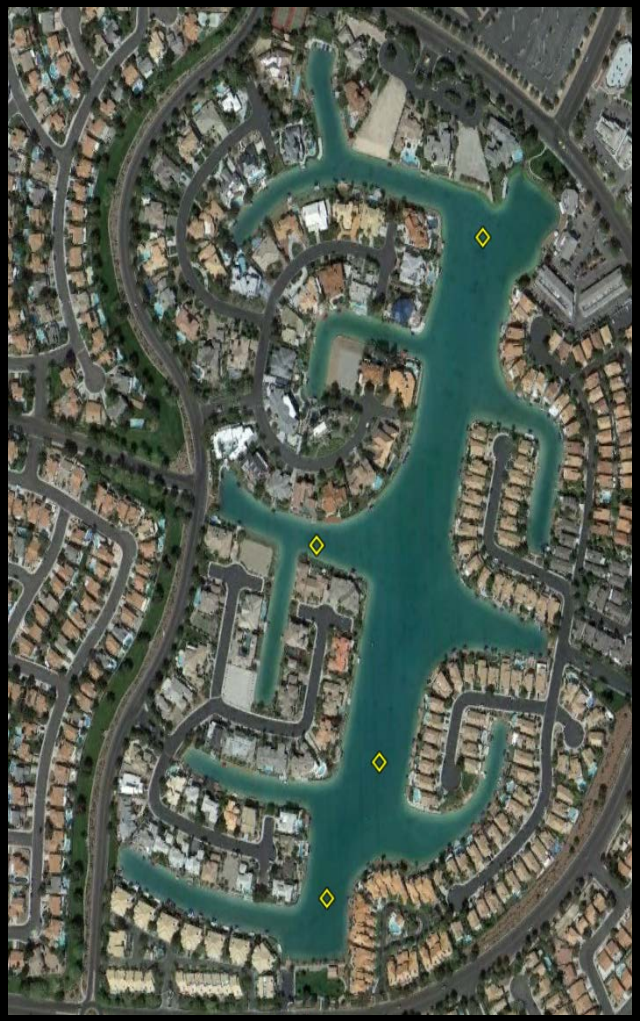
Fish displayed marked increase in size and activity.



# Sampling Event
# Lakes at Sahara, November 2018

| Species | # Fish | Avg. TL (mm) |
|---|---|---|
| Razorback Sucker | 10 | 581 |

| Razorback | # Fish |
|---|---|
| Female | 0 |
| Male | 10 |
| **Total** | **10** |



# Sampling Event
# Center Pond at Overton Wildlife Management Area, November 2018

| Species | # of Fish | Avg. TL (mm) |
|---|---|---|
| Razorback | 14 | 524.7 |
| Channel Catfish | 2 | 225 |
| Common Carp | 1 | 505 |
| Blue Gill | 1 | 140 |
| Largemouth Bass | 8 | 318 |
| **Total Fish** | **26** | |

- Set (4) 150’ Trammel Nets for the Annual Sample

## 2019: Seven RZB, 523 mm Avg TL

# Safe Harbor Agreement Desert Shores Established 2017

New location secured for future safe harbor/grow out for Razorback and Bonytail.

Stocking completed 2018:

~180 Razorback in Lake Sarah, January
~790 Bonytail in Lake Madison, April

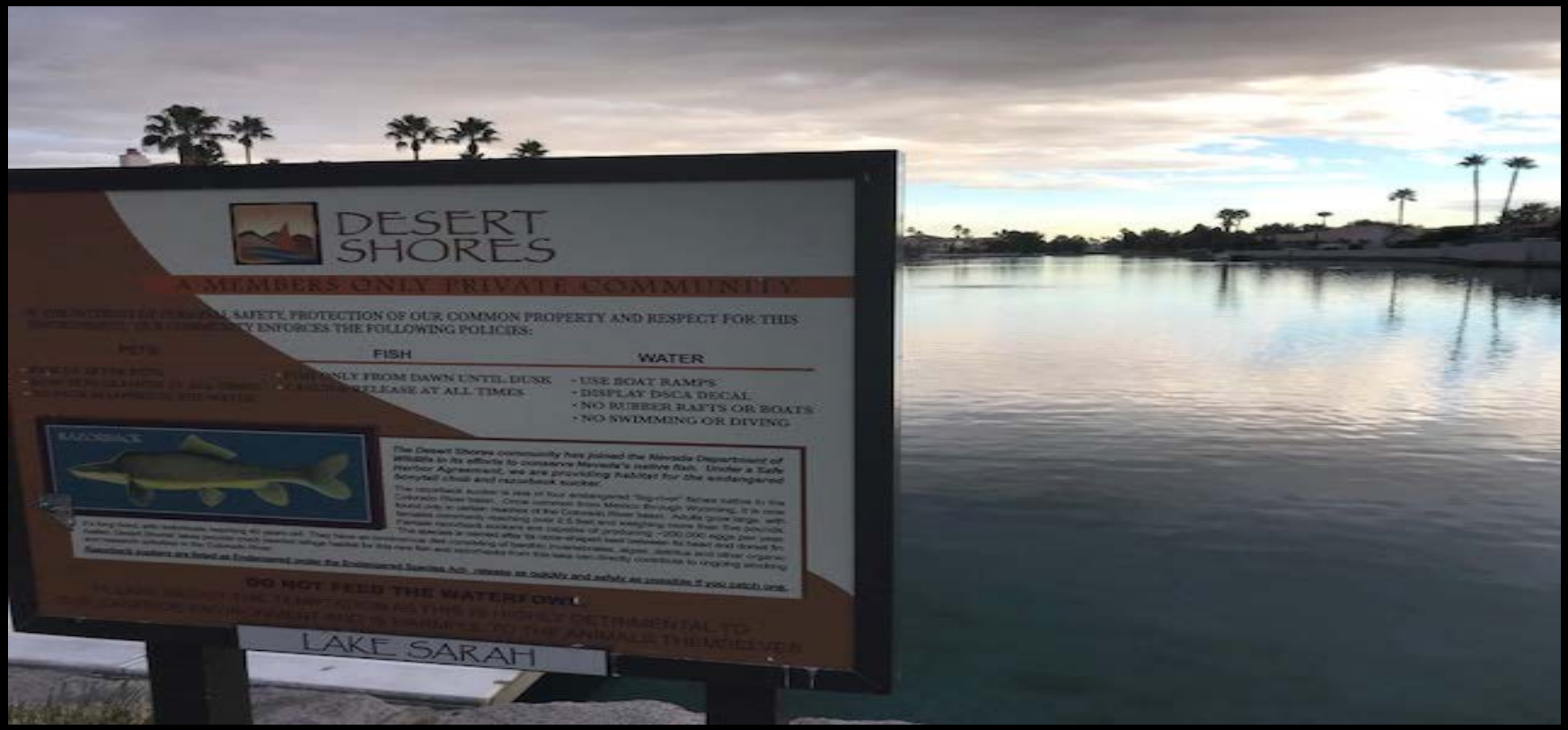
Potential discussions to stock Colorado Pikeminnow in the center pond. (Lake Jacqueline) ?????

# Desert Shores: Lake Sarah

# Sampling Event Desert Shores RBS November 2018

| RBS | # of Fish | Avg TL (mm) |
|---|---|---|
| | 10 | 527.9 |

- Set (4) 150’ Trammel Nets
- RBS initially stocked Jan 2018 at 403.9mm



# Sampling Event Desert Shores BTC November 2018

| BTC | # of Fish | Avg TL (mm) |
|---|---|---|
| | 32 | 423.7 |

- Set (4) 150’ Trammel Nets
- BTC Initially Stocked Apr 2018 at 403.9mm
- (5) YOY were caught Avg 260.2mm
- Lake Madison

# Upcoming Work Activities 2020

- Continue rearing of Razorback Sucker and Bonytail on station from previous years.
- Continue stocking BT/RZB that have attained a TL > 305 mm.
- Receive and rear up to ~11,000 fingerling BT, up to 10,000 larvae/fingerling RZB.
- Continue holding/spawning of Moapa Dace for research projects.
- Continue Sampling  Safe Harbor Agreement  Populations .
- Upgrade larval system to 12,000 capacity

# Old system

- Raw water flow-through
- Limited capacity
- High electrical demand
- Static baths problematic

# New System Planned

- Closed System Recirculating
- Impervious to maintenance shutoffs
- Higher Capacity
- Long treatments possible

BUT…

- Some chemicals off the table
- Many eggs in few baskets