Flannelmouth Sucker Population Status and Habitat Use in the Colorado River Below Davis Dam

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Lower Colorado River
Multi-Species Conservation Program

Background
- Not historically common
- 611 fish stocked in 1976 (AZGFD)
- Established self-sustaining population ~2400 adults
Study Area

• Davis Dam to Lake Havasu
• Upper half = Reinforced shorelines and Rocky substrates
• Lower half = Canyon walls, large backwaters, sandy substrates
Daily river fluctuations

- Daily fluctuations >10,000 cfs
- >8 acres/mile dewatered
Young of Year (<70mm)
Effort to determine relative abundance and habitat use

- Dip netting with light
- Seining
- Backpack shocking
- Snorkel surveys
Results

- March to May – 100’s larvae collected
- June – 100’s of young juv. (<30mm)
- July – 10’s of young juv. (<70mm)
- August – 0 young fish

- Most common along undeveloped shorelines
- River habitats almost exclusively FMS
- Backwater vs. slackwater CPUE similar in April
- Undetectable in backwaters in June
Juvenile (70-350mm)

Effort
- ½ inch trammel nets
- E-fishing at extremely low flows
- Snorkel surveys
- Seines

Results
- Few collected since 2006
- Range 135 - 341 mm
- Majority of contacts in Topock Gorge are sub-adults
Aging

137 FMSU were fin clipped for aging

- TL averaged 574 mm (148-673)
- Avg. age = 14 Yrs (2-27)
Sonic Telemetry

- 15 males in 2006 (14 month tag)
- 20 fish in 2007 (36 month tag)
- Manual tracking
- Collection of habitat data
- SUR’s
Telemetry Results

• Habitat Utilization
  - cobble dominant substrate
  - depths 2-4 meters
• Males range up to 9 miles
  - average 6 miles
• Females range up to 23 miles
  - average 9 miles
  SUR’s showed possible patterns of night time use
Flannelmouth Congregations
Summary

• Adult population appears stable

• YOY – majority found in slackwater habitats adj. channel. Less predators in slackwater habitats vs. backwater.
• Juveniles and Subadults – Rarely contacted. Present in channel or backwater habitats… but to what extent?
• Adults – Population appears stable and healthy. Majority of adult use is upstream of California. Utilization of backwaters and nearshore channel habitats increases during the spawning season (recoup during spawning?)
Acknowledgements

• CDFG
• USBR, Boulder City, NV
• Nevada State Parks
• AZGFD
• NDOW
• NPS
• Bio-West
• BLM

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