2019 LTEMP
Vegetation Mitigation
River Mission
April 16 – May 1 2019
LTEMP EIS

- Negative impacts of Glen Canyon Dam operations on riparian health
  - Encroachment of invasive species
  - Spread of exotic species
  - Long-term decline in native plant communities
LTEMP Vegetation Project

FY 2018
- GLCA mitigation work
- GRCA planning, database and plant production

FY 2019
- GLCA monitoring and additional treatments
- GRCA mitigation work and plant production

FY 2020
- GLCA monitoring and additional treatments
- GRCA monitoring and additional treatments

FY 2021 - 2022
2019 River Mission Timeline

FY 2018 Funding (9/30/2018)

FY 2019 Funding

Agreement with GLCA (2/14/2019)

River logistics contracting (2/15/2019)

Ancestral Lands task order (2/22/2019)
River Mission Goals

- Reduce vegetation encroachment into campsites
- Treat exotic species benefitting from LTEMP flows
- Return geomorphic processes at sediment-depleted cultural sites
- Engage with Tribal Partners
- Test new mobile GIS data collection applications
River Mission Work

- NPS
  - 4 Staff
    - Supervisor
    - Botanist
    - Exotics
    - Database / GIS

- Ancestral Lands
  - 2 Crews
    - Gallup
    - Whiteriver

- GCMRC
River Mission Work

Encroachment

- Define treatment centers
- Pre-treatment radial measurements
- Removal / Disposal
- Post-treatment radial measurements
River Mission Work

Exotics

- Define treatment areas for camelthorn, perennial pepperweed, and Russian thistle
- Snip and Drip
- Removal / Disposal
- Post-treatment polygon measurement
River Mission Work

Cultural Site Source Area Clearance

Polygon Area (m)

<table>
<thead>
<tr>
<th>Mile</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>223.5 Mile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basalt Camp B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basalt Camp A</td>
<td></td>
<td>1000</td>
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<tr>
<td>24.5 Mile</td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>

Polygon Area (m)
River Mission Work

Basalt Camp and Cultural Site

Legend
- Red: Pre-Treatment
- Green: Post-Treatment

Produced by GRCA SRM Wilderness Recreation
Aug 2019
River Mission Work

Campsite Encroachment Clearance

Polygon Area (m)

Before
After

0 200 400 600 800 1000 1200 1400 1600

GCY Camp B
GCY Camp A
Surprise Canyon
202 Mile
Lower Chevron
Mohawk B
Mohawk A
122 Mile
Granite B
Granite A
Nevills B
Nevills A
Unkar Left
Basalt Camp B
Basalt Camp A
Below Buck Farm

Predicate River Mission Work
River Mission Work
River Mission Work

Exotics

- Three sites treated for extensive camelthorn and Russian thistle, and perennial pepperweed
- **Camelthorn:**
  - 5,050 plants
  - 7.68 ha (21.3 ac)
- **Perennial pepperweed:**
  - 362 plants
  - 0.21 ha (.58 ac)
- **Ravenna grass**
  - 11 plants
  - .0002 ha (.006 ac)
2019 LTEMP
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