



## Escalante River Watershed Partnership Summary of 2017 Accomplishments

The Escalante River Watershed Partnership (ERWP) celebrated its 9<sup>th</sup> year working in the watershed on riparian restoration and related activities. Below is a summary of these outstanding accomplishments, as well as challenges, that took place in 2017.

### General Partnership Accomplishments

#### Milestones

- Successfully completed Restore our Rivers Initiative (a fundraising campaign including nine watershed partnerships, designed to raise funds from private donors for historically difficult-to-fund partnership activities, such as capacity and long-term monitoring).
- Lonnie Pilkington received the 21st Century Conservation Service Corps (21CSC) Champion of the Year Award

#### Transitions

- ERWP bade a fond farewell to long-time facilitator Michele Straube in June 2017.
- ERWP welcomes Kim Kernan as new facilitator.
- Sheridan Wilder was hired as ERWP's part-time, temporary Administrative Assistant (her term ended as of November 2017).

#### Special Events

- ERWP sponsored **three public outreach events and presentations** in 2017:
- *History in the Attic – Then and Now* event at Boulder Community Center co-sponsored by Boulder Heritage Foundation included a slide show of old photos and most recent retakes.
- *The Four Corners Potato: Conserving an Ancient Food from Escalante, Utah*, presented by Dr. Lisbeth Louderback, Archeology Curator, Natural History Museum of Utah and Dr. Bruce Pavlik, Plant Conservation Director, University of Utah's Red Butte Garden presentation at the Showhouse in Escalante where over 200 people attended.
- ERWP conducted a field trip during the October Full Partnership meeting in Escalante to the Hwy 12 bridge. Approximately 30 partners and community members attended the event where staff discussed Russian olive treatment techniques, provided an update from the conservation corps, presented the current status of private lands work, and fish inventory and habitat updates.

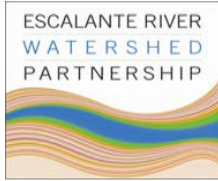
### Coordinating Committee

#### Strategic Planning – Coordinating Committee December Retreat

- During the December retreat, the Coordinating Committee reviewed the Action Plan, what has been accomplished, and where ERWP should focus its efforts in the upcoming year. The Committee also continued discussion regarding capacity needs and potential changes to those needs as the Partnership transitions from primary treatment to monitoring and maintenance of RO. The retreat included members from the newly formed Monitoring &

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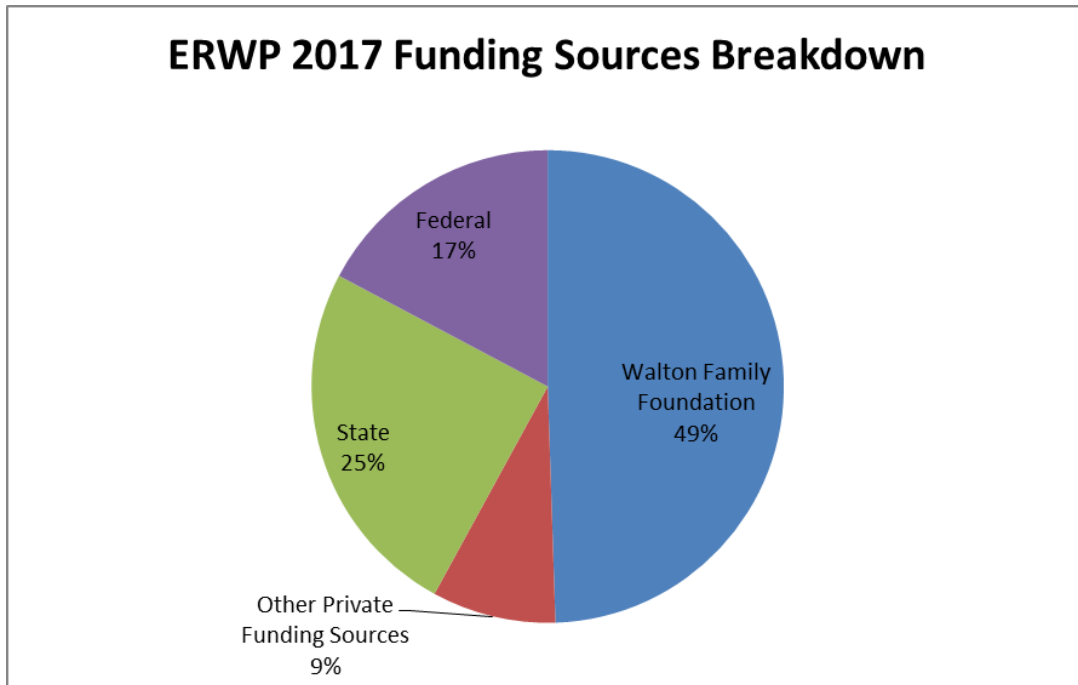
Maintenance sub-committee and addressed, in detail, the draft Monitoring & Maintenance Plan and provided input to help resolve outstanding issues.

### **Watershed Partnership Coordinator and Administrative Assistant**

- Grand Staircase Escalante Partners hired a part-time, temporary administrative assistant for ERWP tasks including newspaper announcements, full partnership meeting logistics, annual corps training logistics and setup, website updates, and expense tracking.
- ERWP Coordinating Committee plans to revisit hiring a Watershed Partnership Coordinator in 2018 while developing a strategic plan.

### **Fundraising**

- Approximately \$1.5M (cash only) was raised to implement high priority restoration actions throughout the Escalante watershed in 2017. Funding sources include private foundations and donations, as well as federal and state grants. 2017 marked the first year ERWP brought in over \$1,000 in private donations marked for capacity, in addition ERWP received funding from the Patagonia Foundation for the first time.





- ERWP participated in the second year of RiversEdge West's (formerly Tamarisk Coalition) Restore our Rivers (ROR) campaign. ERWP raised a total of in \$59,326 in eligible matching dollars (cash only) from a variety of private sources, and has received a total of \$74,912 over the course of the two years of ROR to be used for coordination and long term monitoring.
- Walton Family Foundation has committed to additional funding for the partnership through June 2019.

## ERWP Action Plan

- The Coordinating committee reviewed and updated the 10-year Action Plan priorities the winter of 2017, with input from all Committee chairs. This plan acts as a comprehensive guide to Escalante Watershed Restoration, encompassing issues of water quantity and quality, riparian restoration, native species preservation, research, and education and outreach.
- The plan is a living document, and is updated annually to capture adaptive management needs in a dynamic watershed. The latest version is now available and has been distributed to partners and posted to the ERWP website.

## Education and Outreach

### Outreach

- ERWP setup a booth during the Escalante Canyons Art Festival discussing ERWP community projects with art festival attendees and local community members.
- Volunteer Trips – public lands:
  - Four week-long trips were held in 2017 – thanks to the Great Old Broads for Wilderness, Wilderness Volunteers (both spring and fall attendees), and Vanderbilt University's Alternative Spring Break Program.
  - Over 2,500 volunteer hours were performed by these groups on ERWP's woody invasive restoration program on public lands.
- Volunteer Restoration Events – private lands:
  - One volunteer event was held in March to plant willows and broadcast native seed in Upper Valley, as part of a joint effort with USFWS Partners for Fish and Wildlife Program and the Natural Resources Conservation Service.
  - A volunteer event was held near Boulder in April to broadcast two different native seed mixes and install a wide variety of native potted plants in partnership with the USFWS Partners for Fish and Wildlife Program.
- ERWP staff joined Bryce Valley high school students to plant willows in Henrieville Creek and worked with the local chapter of Future Farmers of America to restore a corral south of Cannonville.
- USFWS Regional Managers joined ERWP staff and the Natural Resources Conservation Service staff on a tour highlighting private land projects in the watershed.
- Restoration work within the Escalante Watershed was highlighted in several films including [This American Land](#) and Walton Family Foundation's [Water in the West film](#). Films were recorded in 2017 and published in 2018.
- Over 36,000 have been reached through ERWP's outreach activities in 2017.



## Communications

- ERWP Facebook page continues to be updated and visited. <https://www.facebook.com/EscalanteRiverWatershedPartnership>
- ERWP Website [www.escalanteriverwatershedpartnership.org](http://www.escalanteriverwatershedpartnership.org)
- News articles about ERWP-related activities were published in:
  - Wayne and Garfield County *Insider*
  - University of Utah Environmental Dispute Resolution Center
  - *Trout Unlimited (online)*
  - *Tamarisk Coalition (Rivers Edge West) Riverside Stories Series*
  - *USGS Publication - "Case Studies of Riparian in Southwestern United States - Principles, Challenges, and Successes"*

## Science & Conservation Targets Committee

### Native Fish Update

- Three species (Roundtail Chub, Flannelmouth Sucker, Bluehead Sucker) sampling was conducted in 29 stations on the mainstem Escalante River from upstream of Sand Creek to downstream of Coyote Gulch and 18 stations in the upper six tributaries including Pine Creek, Mamie Creek, Sand Creek, Calf Creek, Deer Creek, and Boulder Creek.
- Mainstem Stations:
  - Roundtail Chub were distributed from Boulder Creek to downstream of Coyote Gulch and were common to abundant in a 16.3 km reach from upstream of Fence Canyon to downstream of Twentyfive Mile Wash. Reproduction and recruitment were confirmed.
  - Flannelmouth Sucker were captured in all stations sampled and was the most abundant of the three species in nearly all stations sampled. The Flannelmouth Sucker population was robust with multiple age classes represented. Reproduction and recruitment were confirmed.
  - Bluehead Sucker were distributed from above Sand Creek to downstream of Twentyfive Mile Wash. One individual was also captured during quantitative sampling in Coyote Gulch. The Bluehead Sucker population was robust in the 19.2 km reach from above Sand Creek to downstream of Boulder Creek with multiple age classes represented. Reproduction and recruitment were confirmed.
- Tributary Stations:
  - Flannelmouth Sucker and Bluehead Sucker were distributed in Mamie Creek, Sand Creek, and Boulder Creek but in very low numbers.
- Brown Trout was the most abundant species captured in all tributaries sampled and accounted for 60.3% of the total catch. Cold water fish: As of 2018, 8 populations of the Conservation Agreement fish species Colorado River cutthroat trout are occupying 27.6 stream miles; this compares with 5 remnant populations occupying 6 stream miles in 1990's.

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<http://escalanteriverwatershedpartnership.org/>



- Monitoring activities:
  - Continuous temperature monitoring was conducted on 3 stream locations.

### **Water Quality**

Citizen Science Utah Water Watch: ERWP joined forces once again with Utah State University in fall of 2017 to launch a second training for volunteer-based water quality monitoring program in the Escalante watershed. ([www.usu.edu](http://www.usu.edu)).

### **Dixie National Forest**

- Made additional progress on water use mapping and verification within the watershed.
- Monitored areas of Forest treated for Russian olive.
- Continued implementation of 395 acres of fuels reduction work along Forest-private land boundary in Main Canyon west of Escalante.
- Completed NEPA analysis and decision for 11,000 acres of vegetation treatments in the Upper Valley area southwest of Escalante, including 106 acres of stream restoration and 536 acres of fuels reduction along Forest-private land boundary
- Successfully pursued several funding sources for the Hall Creek aquatic organism passage (AOP). When constructed AOP will reconnect an additional 2.6 miles of Colorado River cutthroat trout habitat with 8 miles of stream habitat that has already been restored.
- Within the Escalante River watershed, approximately 70 miles of roads were repaired, improved and maintained to minimize erosion and to keep users on designated routes.

### **Grand Staircase Escalante National Monument**

- In partnership with ERWP, hosted the Utah Water Watch citizen science training level 1 and 2 at the Escalante Interagency Visitor Center.
- The step down for Colorado Plateau Rapid Ecological Assessment using aquatic resources as a case study was implemented.
- Salinity control in the watershed. Cleaned out several salinity ponds.
- Plans to initiate the turkey tracking project. On the ground work started in 2018.

### **Hydrology**

- Monitoring (USFS):
  - Summertime stream temperature on 6 streams.
  - Water stage on 4 streams.
  - Partial Multiple Indicator Monitoring (Bank alterations only) on 12 streams.
- Surveys: Completed river assessment survey on 1 stream.
- Springs and Seeps (NPS):
  - \$30,000 in funding was secured to conduct a 2-year survey for characterization of springs and seeps in the Escalante basin.

### **Science and Research**

- Watershed Resource Database: ERWP's GIS Specialist through University of Utah's DIGIT Lab continues to work with researchers and land managers to assimilate all known datasets and associated metadata from throughout the watershed. This database is a central



repository and is available to the public, with some access limitation based on data ownership.

- ERWP has partnered with BLM and USU to implement a landscape level assessment as part of the Rapid Ecoregional Assessment (REA) program.
- South Hollow: Dennis Bramble continued monitoring of prospective reference site including: repeat photography, collection of data from the weather station, and tracking water table dynamics with automated piezometer well;
- In May the South Hollow property was used for a class on restoration ecology for the Master Naturalist Program;
- Dennis began discussions for possible linkage of three private properties (Hoyt, Bramble, Knezevich) in a network for purpose of long-term monitoring, research and education within the Escalante watershed.

### **Russian olive invasion study**

- A study to understand the mechanisms for invasion of Russian olive in the Escalante Watershed has been completed and has gone through final review. The study is expected to be published sometime in mid-June of 2018.

### **Woody Invasive Control and Restoration Activities**

#### **Public Lands (NPS, Dixie NF, BLM, and State):**

- Total acres treated – 366
- Total acres retreated – 453

#### **Private Lands: (Boulder and Escalante)**

- ERWP partnered with the Natural Resources Conservation Service and the USFWS Partners for Fish and Wildlife Program to restore private lands in the watershed.
- Total acres treated – 139
- Total acres retreated – 447
- Total acres planted or seeded– 139

### **Fundraising**

- Over \$1.25 million in public and private funds (cash only) were raised in 2017 to accomplish Woody Invasive control in the Escalante Watershed on public and private lands.

### **Rapid Monitoring Assessments**

- Four new rapid monitoring sites were established.
- Five post-treatment rapid monitoring sites were completed.
- Monitoring data was uploaded to the geodatabase.

### **Planning & Reporting**

- The Woody Invasive Control and Restoration Plan is available on the ERWP website: <http://escalanteriverwatershedpartnership.org/wp-content/uploads/2015/04/Woody-Invasive-Control-Plan-V2-Final-1.pdf>.
- A subcommittee of the WICR committee worked diligently on the Monitoring & Maintenance Plan. Final document can be found here: <http://escalanteriverwatershedpartnership.org/wp->



[content/uploads/2017/09/ERWP\\_MONITORING-AND-MAINTENANCE-PLAN\\_FINAL\\_red.pdf](#)

- 2017 Annual Monitoring Report was developed through the help of Stillwater Sciences and other ERWP Partners. This report summarizes and analyzes treatment and monitoring data from 2017.

### **Conservation Corps**

- Hosted by ERWP and Grand Staircase Escalante Partners, a four Corps training program was held in Escalante in August, with nearly 75 Conservation Corps members in attendance who are set to work on woody invasive species treatments in Escalante Watershed during fall 2017. This training provided skills to prepare crew members and leaders for Russian olive treatments on public lands within the Escalante Watershed between September and November.
- Four conservation programs were engaged in woody invasives work on public lands: Arizona Conservation Corps, Southwest Conservation Corps – Ancestral Lands Program, Utah Conservation Corps, and Canyon Country Youth Corps.

### **GIS**

- The woody invasive database is updated using ArcGIS and University of Utah's DIGIT Lab services. ERWP has a public map of treatments by year that can be found at: <http://escalanteriverwatershedpartnership.org/what-we-do/riparian-restoration/riparian-restoration-treatments-by-year/>.