

**40th Annual Researchers Meeting
of the
Upper Colorado River Endangered Fish
Recovery Program
and the
San Juan River Basin Recovery Implementation
Program**

**Fort Lewis College, Student Union Ballroom (1000 Rim Drive) and
Durango and Silverton Narrow Gauge Railroad (479 Main Avenue)
Durango, Colorado 81301**

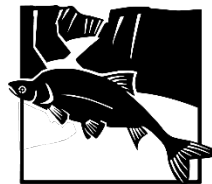
14-15 January 2020

Program and abstracts of presented papers and posters

Sponsored by:

Upper Colorado River Endangered Fish Recovery Program

San Juan River Basin Recovery Implementation Program



**Upper Colorado River
Endangered Fish
Recovery Program**

Tuesday 14 January 2020

8:00 am WELCOME, LOGISTICS, AND INTRODUCTION TO THE 40TH JOINT ANNUAL RESEARCHERS MEETING – Melissa Mata and Tom Chart.

Session 1: Hydrology and temperature

Moderator: Melissa Mata

8:20 1- REVIEW OF 2019 HYDROLOGIC CONDITIONS IN THE UPPER COLORADO RIVER BASIN – **Don Anderson**.

8:40 2- EFFECTS OF DAM OPERATIONS AND HYDROLOGY ON WATER TEMPERATURES IN THE GREEN AND YAMPA RIVERS – **Dave Speas**.

Session 2: Fish passage, movement, tributary use, passive detection, entrainment, and data management

Moderator: Tildon Jones

9:00 3- MUCH ADO ABOUT SOMETHING: OPTIONS FOR SOLVING THE FISH PASSAGE PROBLEM AT THE PIUTE FARMS WATERFALL – **Mark McKinstry**, Casey Pennock, Eliza Gilbert, Chuck Cathcart, and Peter MacKinnon.

9:20 4- SEASONAL MOVEMENTS OF RAZORBACK SUCKER IN THE SAN JUAN RIVER-LAKE POWELL INFLOW – **Casey Pennock**, Keith Gido, and Mark McKinstry.

9:40 5 - A SMALL, THERMALLY DISCONNECTED TRIBUTARY PROVIDES IMPORTANT SEASONAL RESOURCES FOR COLORADO PIKEMINNOW IN THE DAM-REGULATED GREEN RIVER SYSTEM – **Edward Kluender** and Kevin Bestgen.

10:00 **BREAK**

10:20 6- UNPRECEDENTED USE OF ROUBIDEAU CREEK BY SPAWNING RAZORBACK SUCKER – **Zachary Hooley-Underwood**, Kevin Thompson, and Kevin Bestgen.

10:40 7- PASSIVE DETECTION DATA AID ESTIMATION OF RAZORBACK SUCKER *XYRAUCHEN TEXANUS* SURVIVAL RATES– **Koreen Zelasko**, Kevin Bestgen, and Gary White.

11:00 8- ENTRAINMENT OF ENDANGERED FISH IN THE GREEN RIVER CANAL, UTAH, 2013-2019 – **Dave Speas**, Peter MacKinnon, Julie Stahli, and Kevin McAbee.

11:20 9- STREAMS UPDATE 2020 – AN UPDATE ON THE ONLINE PIT-TAG DATABASE – **Julie Stahli** and Amy Greenwell.

11:40 **LUNCH**

Session 3: Nonnative fish management, quantifying threats, and population response

Moderator: Scott Durst

- 1:00 pm 10- QUANTIFYING NONNATIVE IMPACTS: PREDATORY THREAT OF CHANNEL CATFISH – **Skyler Hedden**, Keith Gido, Crosby Hedden, Casey Pennock, Bobby Duran, Brian Hines, Eliza Gilbert, Mark McKinstry, Scott Durst and Nathan Franssen.
- 1:20 11- RESPONSE OF INVASIVE BROWN TROUT TO SUSTAINED MECHANICAL REMOVAL IN BRIGHT ANGEL CREEK, A GRAND CANYON TRIBUTARY, WITH AN EVALUATION OF MOVEMENT IN THE MAIN CHANNEL COLORADO RIVER – **Robert Schelly**, Brian Healy, Charles Yackulic, Michael Dodrill, Clay Nelson, Emily Omana Smith, Mark McKinstry, Sarah Haas, and Phaedra Budy.
- 1:40 12- POPULATION DYNAMICS OF SMALLMOUTH BASS IN TWO UPPER COLORADO RIVER BASIN RESERVOIRS: SHORT-TERM RESPONSES TO AN ANGLER HARVEST INCENTIVE PROGRAM – **Adam Hansen**, Eric Gardunio, and Tory Eyre.
- 2:00 13- MANAGING WALLEYE EXPANSION IN THE UPPER COLORADO RIVER BASIN WITH EDUCATION, ERADICATION AND ESCAPEMENT PREVENTION: VERSION 6.0 – **Travis Francis**, Chris Michaud, Chris Smith, Michael Partlow, Ben Felt, and Ed Kluender.
- 2:20 14- SMALLMOUTH BASS ABUNDANCE, DISTRIBUTION, AND POPULATION DYNAMICS IN THE DOLORES RIVER – **Jim White**, Dan Cammack, and Eric Gardunio.
- 2:40 15- NORTHERN PIKE MANAGEMENT IN THE UPPER COLORADO RIVER BASIN, 2019 – **John Hawkins**, Travis Francis, Ben Felt, Jenn Logan, Chris Michaud, Michael Partlow, Kenna Elbin, Matthew Breen, John Caldwell, Kevin Bestgen, Edward Kluender, Koreen Zelasko, Chris Smith, Tory Eyre, Cameron Walford, Donald Tuttle, and Kyle Dick.
- 3:00 16- MECHANICAL REMOVAL OF SMALLMOUTH BASS IN THE UPPER COLORADO RIVER BASIN: 2019 – **Michael Partlow**, Kevin Bestgen, Matt Breen, John Caldwell, Tory Eire, Kenna Elbin, Ben Felt, Travis Francis, John Hawkins, Ed Kluender, Jenn Logan, Chris Michaud, Dale Ryden, Chris Smith, Cameron Walford, Koreen Zelasko.
- 3:20 **BREAK**

Session 4: Native fish management and monitoring

Moderator: Kevin McAbee

- 3:40 17- ASSESSMENT OF AGE-0 COLORADO PIKEMINNOW SURVIVAL IN BACKWATER NURSERY HABITATS OF THE MIDDLE GREEN RIVER, UTAH – **Matthew Breen** and Tildon Jones.
- 4:00 18- HUMPBACK CHUB MONITORING IN DESOLATION AND GRAY CANYONS, GREEN RIVER UTAH; RESULTS FROM 2018 AND 2019 – **John Caldwell**.
- 4:20 19- NONNATIVE PREDATORS AND DECLINING STATUS OF ROUNDTAIL CHUB, YAMPA RIVER, COLORADO – **Cameron Walford**, John Hawkins, and Katherine Lawry.
- 4:40 20- EXPERIMENTS TO DETERMINE EFFECTIVENESS OF LIGHT TRAPS FOR DETECTING RAZORBACK SUCKER LARVAE IN FLOODPLAIN WETLANDS – **Cat de Vlaming** and Kevin Bestgen.
- 5:00 **ADJOURN**
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**Evening Social at
Durango and Silverton
Narrow Gauge Railroad
(479 Main Avenue)**

6:30 – 8:30

**FOOD AND BEVERAGES
POSTER SESSION
SPECIAL AWARDS**

Wednesday 15 January 2020

Session 5: Native fish management, population dynamics and prey base

Moderator: Nate Franssen

- 9:00 am 1- DRIVERS OF FISH POPULATION DYNAMICS IN THE GRAND CANYON – **Charles Yackulic**.
- 9:20 2- MANAGING FOR VIABLE HUMPBACK CHUB POPULATIONS VIA COST-EFFECTIVE INVASIVE SPECIES CONTROL STRATEGIES: ADAPTIVE MANAGEMENT IN THE GRAND CANYON – **Lucas Bair**, Charles Yackulic, and Michael Springborn.
- 9:40 3- AQUATIC INSECT DIVERSITY AND DISTRIBUTION IN THE COLORADO RIVER BASIN – **Anya Metcalfe**, Jeffery Muehlbauer, Theodore Kennedy.
- 10:00 **BREAK**

Session 6: Flows, sediment, channel morphology, and fish habitat – Implications for river management (Panel Discussion)

Moderator: Don Anderson

- 10:20 4- MODELING FLOW DYNAMICS AND HYDROLOGIC REGIMES IN GREEN RIVER FLOODPLAIN NURSERY HABITATS – **Eugene Yan**, John Hayse, Kirk LaGory, Jeremy Feinstein, Leroy Walston, and Yuki Hamada.
- 10:40 5- EVALUATION OF SMALLMOUTH BASS SPAWNING SITES IN THE UPPER GREEN RIVER USING LiDAR – **Leroy Walston**, Kirk LaGory, John Hayse, and Eugene Yan.
- 11:00 6- INFLUENCE OF SUPPLY ON SEDIMENT TRANSPORT AND GEOMORPHIC CHANGE IN THE GREEN AND COLORADO RIVERS, CANYONLANDS, UTAH, USA – **David Dean**, David Topping, John Schmidt, and Paul Grams.
- 11:20 7- INTERPRETING FLUX-BASED SEDIMENT BUDGETS IN A HABITAT CONTEXT: HOW LARGE MUST BE THE ESTIMATES OF SEDIMENT DEFICIT OR SURPLUS TO BE OF CONCERN TO RIVER AND LAND MANAGERS? – **Christina Leonard**, John Schmidt, David Topping, and Ronald Griffiths.
- 11:40 8- DRIVERS OF SAND TRANSPORT AND STORAGE, WITH IMPLICATIONS FOR FISH HABITAT, IN THE YAMPA AND GREEN RIVERS – **David Topping**, Ronald Griffiths, David Dean, Paul Grams, Erich Mueller, John Schmidt, and Christina Leonard.
- 12:00 pm **LUNCH**

- 1:20 9- CHANNEL AND FLOODPLAIN CHANGES IN THE MEANDER CANYON SEGMENT OF THE COLORADO RIVER IN CANYONLANDS NATIONAL PARK, UTAH – **Paul Grams**, Eric Head, and Erich Mueller.
- 1:40 10- SIDE CHANNEL EVOLUTION AND DESIGN: ACHIEVING SUSTAINABLE HABITAT FOR AQUATIC SPECIES RECOVERY – **Joel Sholtes**, Nathan Holste, Nathan Bradley, Caroline Ubing, and Timothy Randle.
- 2:00 Panel discussion – Flows, sediment, channel morphology, and fish habitat: Implications for river management (40 min).
- 2:40 **ADJOURN**