

COLORADO MESA UNIVERSITY

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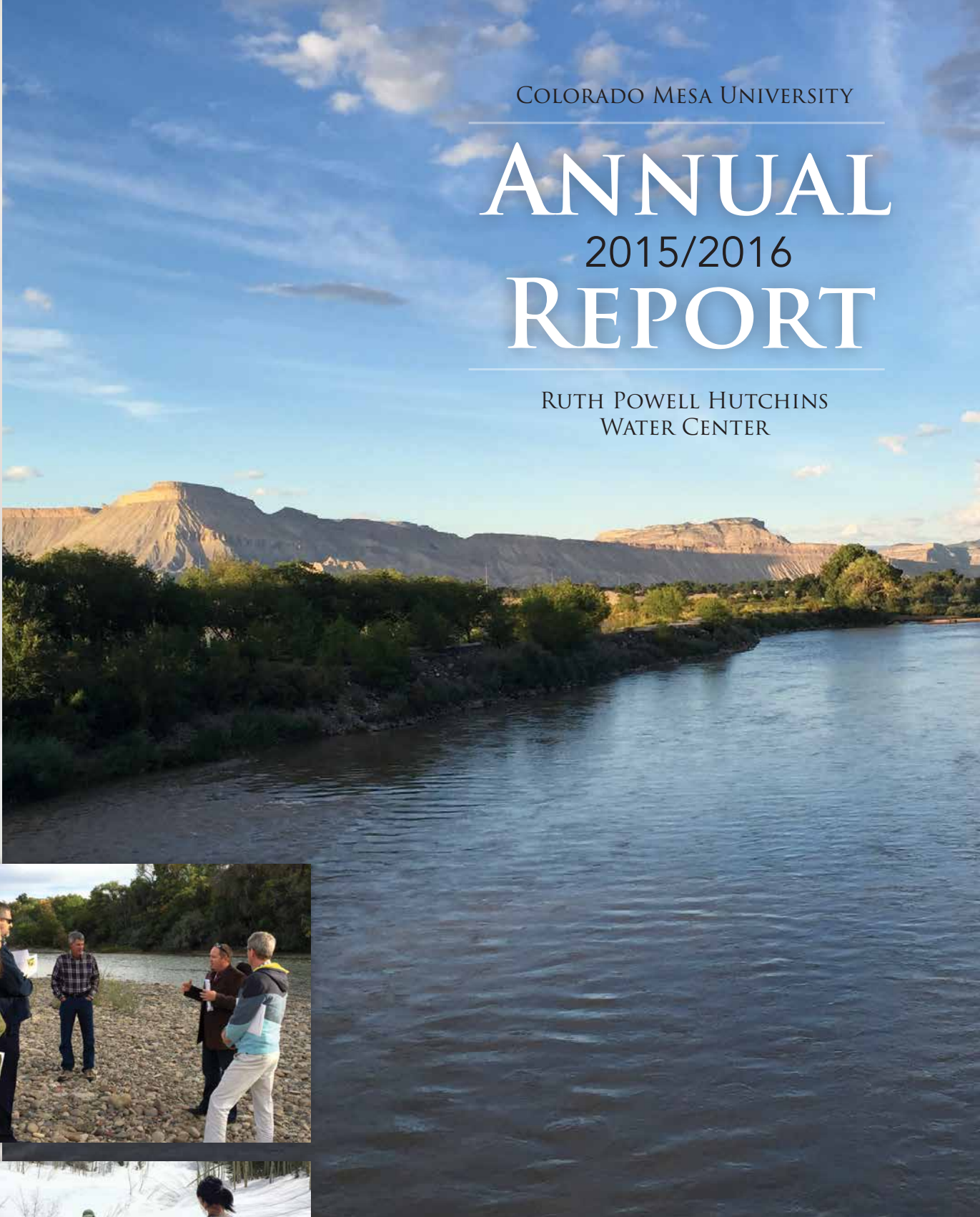
# ANNUAL

2015/2016

# REPORT

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RUTH POWELL HUTCHINS  
WATER CENTER



  
**COLORADO MESA**  
UNIVERSITY

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RUTH POWELL HUTCHINS  
WATER CENTER

[coloradomesa.edu/water-center](http://coloradomesa.edu/water-center)

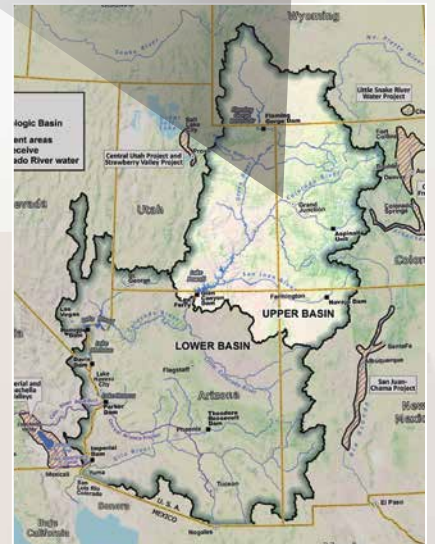
# TABLE OF CONTENTS

- Upper Colorado River Basin maps ..... 2
- Mission ..... 3
- From the Coordinator and Faculty Director ..... 3
- Education and Outreach ..... 4
  - Community Events ..... 4
  - Electronic Communication ..... 4
  - Traditional Media ..... 5
  - Activities for CMU Students ..... 5
- Research ..... 6
  - Upper Colorado River Basin Resource Guide ..... 6
  - Student and Faculty Research ..... 6
  - Scientific and Technical Report Series ..... 7
- Dialogue ..... 7
- Looking Ahead ..... 7
- Financial Summary ..... 8
- Advisory Council ..... 10
- 2015/16 Grantors, Donors and Sponsors ..... 11



## Upper Colorado River Basin

Map credit: Drezden Kinnaird, CMU Geographic Information Systems Student



“ The Water Center is invaluable in providing pertinent and objective water-related information. It is a great resource for all types of water users both locally and regionally to stay informed on current water issues. ”

— Corey Beaugh, Colorado Division of Water Resources and Hutchins Water Center Advisory Council member

To coordinate with the University’s academic and fiscal years, the Annual Report covers the time period July 1, 2015 – June 30, 2016.

Note: Fiscal Year (FY) = July 1 through June 30

# THE MISSION OF THE WATER CENTER AT COLORADO MESA UNIVERSITY IS TO PERFORM AND FACILITATE INTERDISCIPLINARY AND COLLABORATIVE RESEARCH, EDUCATION, OUTREACH AND DIALOGUE TO ADDRESS THE WATER ISSUES FACING THE UPPER COLORADO RIVER BASIN.

## From the Coordinator and Faculty Director



The 2015-16 fiscal and academic year was exciting and productive for the Water Center at CMU, including a new endowment and a new name!

The family of Ruth Powell Hutchins, a longtime Grand Valley water activist, made the initial gift to establish the endowment, and in October 2015, the center's name became the Ruth Powell Hutchins Water Center at CMU. Ruth Hutchins was passionate about Colorado River water, just like we are, and we are honored to have the center named after her.

In 2015 and 2016, we continued stepping up research and dialogue activities, while maintaining a steady flow of educational programming. Our new Scientific and Technical Report series provides a much-needed venue for studies relevant to the Colorado River to be peer-reviewed and published. The 2015 Annual Upper Colorado River Basin Water Forum was a great success, featuring state climatologists from four Colorado River Basin states and more than 100 people in attendance. We have new student research projects in collaboration with faculty at CSU and look forward to continued growth as we fund summer student research with our endowment funds. You'll find an abundance of details below regarding our education and outreach activities.

Looking ahead, we are developing new partnerships as we begin our work on the new Colorado Water Collaboratory to address campus water use with CU-Boulder and Metro State, as well as the new Integrated Water Management Planning effort for the Upper Colorado River in Colorado.

We appreciate your support of the Water Center and we invite you to review this report for highlights of our work in the 2015-16 fiscal and academic year to promote awareness and thoughtful, creative responses to the water challenges facing the Upper Colorado River Basin.

You can get further details on our website at [coloradomesa.edu/water-center](http://coloradomesa.edu/water-center). We hope you will join us in these efforts!

Regards,  
Hannah Holm, Coordinator  
Gigi Richard, Director



Hannah Holm,  
Coordinator



Gigi Richard, PhD,  
Faculty Director

## Education and Outreach

The Hutchins Water Center conducts education and outreach to the general public, water professionals and scholars through community events, e-newsletters, social media and traditional media. In 2015 and 2016, we initiated new partnerships around the state and regionally to broaden and strengthen these activities. On campus, CMU students have benefitted from our continued development of course offerings, lectures by regional water leaders, field experiences and the River Studies and Leadership Certificate we helped establish. Meanwhile, our materials are being used to enhance water education in local K-12 schools.

### Community Events

Our events draw a mix of water professionals, farmers, outdoor enthusiasts, elected officials and other interested citizens.

- In September 2015, we collaborated with the Western Colorado Center for the Arts by providing a lecture by Hutchins Water Center Director Gigi Richard, PhD, and a showing of our documentary film, *Water in the Desert: The Grand Valley and its Rivers*, in conjunction with the opening of an Art Center exhibit featuring local landscapes shaped by water scarcity.
- We invited the community to campus for free showings of the documentary films *The Great Divide*, on Colorado's water history, and *River of Sorrows: Inheriting Today's Dolores River*. In each case, more than 200 people attended.
- We held our annual three-evening Water Course for citizens in February and March of 2016, with the theme, "Planning for Resilience." The course featured seminars on the region's hydrology and climate; Colorado's water and climate plans; water rights and history and planning for resilience in Grand Valley domestic, landscaping and agricultural water use. Retired Colorado Supreme Court Justice Greg Hobbs was a featured speaker.

The Water Center's documentary film, "Water in the Desert: The Grand Valley and its Rivers," was shown at an Art Center exhibit featuring local landscapes shaped by water scarcity.

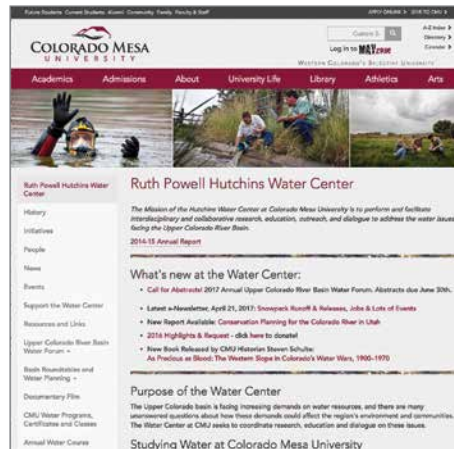
More than 200 people attended free showings of two water-related documentary films, "The Great Divide" and "River of Sorrows: Inheriting Today's Dolores River."

### Electronic Communication

We use electronic communication to stay in touch with people who attend our events or connect in other ways with the Hutchins Water Center. It is also a valuable means for us to collect important information to recirculate through our own networks.

- Our monthly e-newsletter is distributed directly to more than 1,500 people. We use it to share current information on water supply in the Colorado River Basin, new studies, educational events and grant and job opportunities.

- Our Twitter account is followed by nearly 900 people, and our Facebook account is followed by more than 300. We use these modes of communication to promote events, circulate breaking water news and reinforce partnerships with other water organizations.
- Our website, [coloradomesa.edu/water-center](http://coloradomesa.edu/water-center) is continually updated with fresh information on our own activities and other learning opportunities in the region.



Water Center activities and learning opportunities are posted on [coloradomesa.edu/water-center](http://coloradomesa.edu/water-center).

### Traditional Media

The Hutchins Water Center reaches beyond campus and the people who attend our events by writing articles for local newspapers in the region and working with local reporters to promote coverage of our events and other important water stories. For example:

- Our staff wrote articles that appeared in the Glenwood Springs Post-Independent, Delta County Independent and other outlets on myths surrounding the “use it or lose it” aspects of Colorado water law and innovative water conservation efforts. Links to all of these articles are available on our website.
- The Daily Sentinel in Grand Junction has drawn on our events and interviews with our staff in stories on climate change, conflicts between different water interests on the Dolores River and innovative water management.
- Local television news outlets interviewed our staff on the legalization of rain barrels in Colorado, the Colorado Water Plan and how drought affects wildfires.

### Activities for CMU Students

CMU students, faculty and staff may attend all Hutchins Water Center events on campus free of charge. In addition, we promote opportunities focused on CMU students.

- In 2014, CMU offered a new general education science course focused on water entitled “Water, People and the Environment.” This course is now offered every spring semester and is included in the state’s guaranteed transfer program for general education courses.
- The River Studies and Leadership Certificate that we established in partnership with several other universities and the River Management Society is now fully established.
- Our partnership with the One World, One Water Center to hold an annual Student Water Field Conference has continued. In September 2015, we took CMU students to Denver to join undergraduate and graduate students from around the state

Thirty undergraduate and graduate students from around Colorado, including seven CMU students (lower right photo), participated in the Second Annual Student Water Field Conference, hosted in September 2015 by the One World One Water Center at Metro State University in Denver.



to learn about urban water issues and the Colorado Water Plan. Students returned home as “water diplomats” and gave presentations about the water plan to their local communities. The third annual student conference will be back at CMU in September 2016.

- Regional water leaders who spoke at CMU’s 2015 Natural Resource Seminar Series, which CMU students take for credit and community members attend for free, included Dan Birch of the Colorado River District speaking on energy development and water use in western Colorado, and Jim Heneghan of the Delta Montrose Electrical Association speaking on low-impact, sustainable hydroelectric developments, including the hydropower plant on the South Canal near Montrose.

### K-12 Water Education

CMU has long hosted the annual Children’s Water Festival organized by Ute Water. We help with that event and have also contributed to the strengthening of water education in Grand Valley schools through promoting the distribution of educational materials we have developed.

- A “Know your Watershed” booklet we developed several years ago is being distributed to classrooms in science kits developed by the John McConnell Math and Science Center.
- The documentary film we produced in 2014 with Gen9 Productions, *Water in the Desert: The Grand Valley and Its Rivers* is now part of the fifth-grade curriculum in Mesa County Valley School District 51 schools.

### Research

The Hutchins Water Center facilitates, conducts and showcases research on Upper Colorado River Basin water issues through our Upper Colorado River Basin Resource Guide, student and faculty research projects and our scientific and technical report series.

#### Upper Colorado River Basin Resource Guide

We have collaborated with CMU’s library to develop a structure for an on-line resource guide to help people find digital resources on regional water resources and water challenges. Currently, the most populated portion of the guide is the “Colorado Headwaters” section, which we are using as the repository for studies and maps that will form the foundation of the Colorado Basin Roundtable’s Integrated Water Management Planning Framework Project. To explore the resource guide, visit [uppercoloradoriver.org](http://uppercoloradoriver.org).

#### Student and Faculty Research

Our staff have facilitated collaboration among CMU faculty and students and researchers at Colorado State University and other organizations on a variety of projects:

- Hutchins Water Center Director, Gigi Richard, PhD and Stephanie Kampf, PhD, of Colorado State University are conducting a field study on the Grand Mesa to better understand the role of mid-elevation snowpack in streamflow. A CMU student researcher participated in the project as a research assistant and CMU students will be involved as the project progresses.
- Perry Cabot, PhD, the Western Regional Water Specialist for Colorado State University’s Colorado Water Institute, has supervised several CMU student research projects related to agricultural water use.



Visit [uppercoloradoriver.org](http://uppercoloradoriver.org), the Water Center’s online guide for regional water resources.



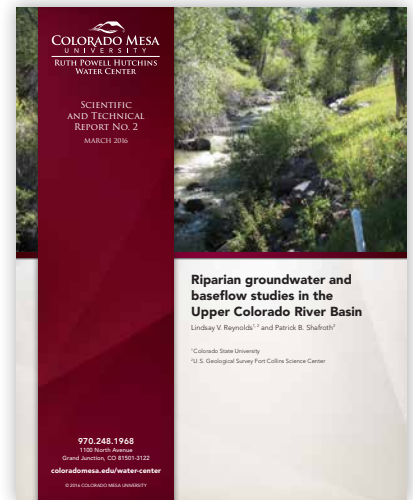
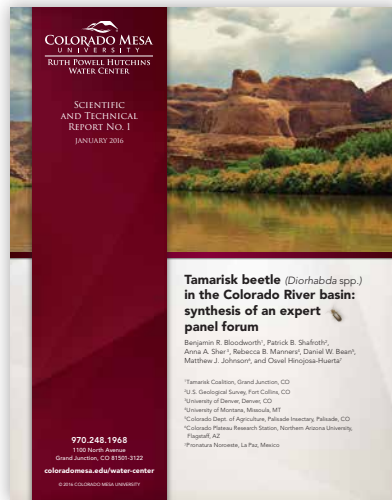
CMU and CSU are collaborating on a field study about the role of mid-elevation snowpack in streamflow on the Grand Mesa.

- Richard has collaborated with the Tamarisk Coalition on a survey of the effects of tamarisk removal on bank erosion.

### Scientific and Technical Report Series

This report series showcases recent research that is useful in understanding and addressing Upper Colorado River Basin water issues.

- The first report in the series, produced in collaboration with the Tamarisk Coalition, is “Tamarisk beetle (*Diorhabda* spp.) in the Colorado River Basin: synthesis of an expert panel forum,” by Benjamin R. Bloodworth, Patrick B. Shafroth, Anna A. Sher, Rebecca B. Manners, Daniel W. Bean, Matthew J. Johnson, and Osvel Hinojosa-Huerta. It was released in January of 2016.
- The second report, “Riparian groundwater and baseflow studies in the Upper Colorado River Basin,” by Lindsay V. Reynolds and Patrick B. Shafroth, was released in March of 2016.

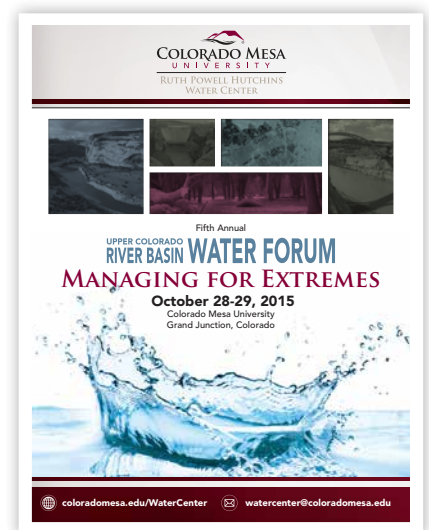


Two reports were produced featuring a study of tamarisk beetles in the Colorado River Basin and another featuring riparian groundwater and baseflow studies in the Upper Colorado River Basin.

### Dialogue

The Hutchins Water Center promotes a spirit of lively inquiry and mutual learning with respect for diverse points of view in all of our events. Our annual Upper Colorado River Basin Water Forum has, since its beginning in 2011, invited people to cross both disciplinary and state lines to share their knowledge and perspectives on our shared water resources. Our staff have also begun to work with other organizations to host and facilitate more targeted meetings focused on specific issues.

- The 2015 Forum theme was “Managing for Extremes,” and featured state climatologists from multiple Colorado River Basin states. Speakers also discussed strategies for adaptation to extremes for fisheries, agriculture and water storage. An all-star panel of water leaders from across the basin then shared their perspectives on the renegotiation of the interim guidelines for managing Lakes Powell and Mead.
- We are coordinating the Colorado Basin Roundtable’s Integrated Water Management Planning Framework Project, which seeks to build a foundation for conducting comprehensive integrated water management plans in the mainstem Colorado River Basin in Colorado. The purpose of these plans will be to identify ways to provide water for environmental needs in conjunction with the needs of agricultural, domestic and industrial water users. One element of this work involves facilitating dialogue between water stakeholders across the basin regarding how to best collect and present data to enable this process.



The annual Upper Colorado River Basin Water Forum focused on “Managing for Extremes” and featured state climatologists.

### Looking Ahead

In 2016-17, the Hutchins Water Center plans to expand involvement of CMU students across our programming. We will more fully develop existing initiatives, as well as take on some new projects. For example:

- We are exploring the creation of a CMU student water research grant program.
- We will focus our media stories on storytelling to capture the personal experiences of people involved in innovative water management, research and restoration activities.
- We intend to increase our involvement in facilitating dialogues related to innovative water management and water security.

## Water Center Financial Summary

	FY14 SUMMARY			FY15 SUMMARY			FY16 SUMMARY		
	Donations + Events	Grants	Total	Donations + Events	Grants	Total	Donations + Events	Grants	Total
<b>Fund Balance from previous FY</b>	\$9,849	\$20,774	\$30,623	\$19,037	\$118,348	\$137,385	\$32,135	\$77,913	\$110,048
<b>INCOME</b>									
Grants		\$169,713	\$169,713		\$4,883	\$4,883		\$4,882	\$4,882
Donations + Sponsorships	\$42,220		\$42,220	\$47,988		\$47,988	\$33,620		\$33,620
Registrations	\$6,770		\$6,770	\$11,420		\$11,420	\$8,005		\$8,005
Tamarisk Coalition Conference (pass through)	\$10,888		\$10,888				\$13,589		\$13,589
Fire re-seeding (pass through)									
SGM				\$3,010		\$3,010			
<b>FY Revenue</b>	<b>\$59,878</b>	<b>\$169,713</b>	<b>\$229,591</b>	<b>\$62,418</b>	<b>\$4,883</b>	<b>\$67,301</b>	<b>\$55,214</b>	<b>\$4,882</b>	<b>\$60,096</b>
<b>EXPENDITURES</b>									
Wages	\$10,138	\$38,007	\$48,145	\$11,340	\$22,090	\$33,430	\$14,425	\$26,374	\$40,799
Benefits	\$1,303	\$5,318	\$6,621	\$1,479	\$2,932	\$4,411	\$1,869	\$3,462	\$5,331
Student Assistants		\$3,020	\$3,020	\$90		\$90		\$1,998	\$1,998
Guest Speakers and Professional Services	\$12,184	\$11,508	\$23,692	\$18,491	\$15,684	\$34,175	\$5,881	\$23,954	\$29,835
Printing	\$177	\$6,640	\$6,817	\$562		\$562	\$4,198	\$1,155	\$5,353
Meeting and Conference Registrations	\$1,891	\$545	\$2,436	\$617	\$597	\$1,214	\$1,217	\$1,320	\$2,537
Overhead**	\$1,229	\$445	\$1,675	\$1,572	\$250	\$1,822	\$3,884	\$2,067	\$5,951
Indirect Costs		\$997	\$997		\$1,587	\$1,587		\$2,007	\$2,007
Event Food and Drink	\$9,959	\$2,877	\$12,837	\$14,782		\$14,782	\$10,619		\$10,619
Subscriptions and Books	\$1,256		\$1,256		\$696	\$696	\$975		\$975
Travel	\$1,654	\$2,782	\$4,436		\$1,483	\$1,483	\$1,243	\$1,811	\$3,054
Tamarisk Coalition Conference (pass through)	\$10,888		\$10,888				\$13,338		\$13,338
Fire re-seeding (pass through)									
Foundation CC fees	\$187		\$187	\$387		\$387	\$345		\$345
Other Expenses and Transfers	\$(177)		\$(177)						
<b>FY Expenditures</b>	<b>\$50,690</b>	<b>\$72,139</b>	<b>\$122,829</b>	<b>\$49,319</b>	<b>\$45,318</b>	<b>\$94,638</b>	<b>\$57,994</b>	<b>\$64,148</b>	<b>\$122,142</b>
<b>FY Net</b>	<b>\$9,188</b>	<b>\$97,574</b>	<b>\$106,762</b>	<b>\$13,099</b>	<b>\$(40,435)</b>	<b>\$(27,337)</b>	<b>\$(2,780)</b>	<b>\$(59,266)</b>	<b>\$(62,046)</b>
<b>Fund Balance</b>	<b>\$19,037</b>	<b>\$118,348</b>	<b>\$137,385</b>	<b>\$32,135</b>	<b>\$77,913</b>	<b>\$110,048</b>	<b>\$29,355</b>	<b>\$18,647</b>	<b>\$48,002</b>

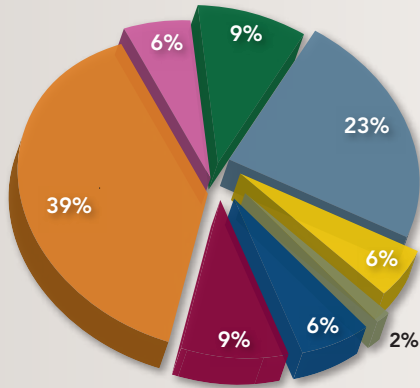
\*FY: Fiscal Year July 1 through June 30

\*\*Overhead: Supplies, telephone calls, advertising, postage, dues and membership, and rent/lease equipment (telephone).

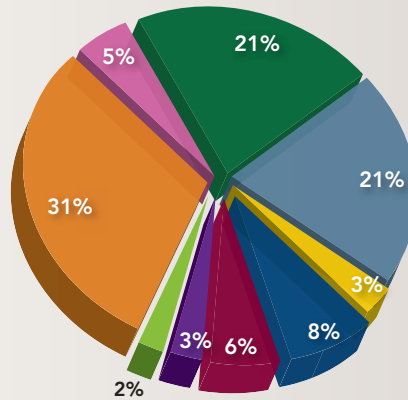


## Water Center Financial Summary (continued)

**FY15 Revenues and Balance, \$204,686\***  
(includes fund balances from FY14)



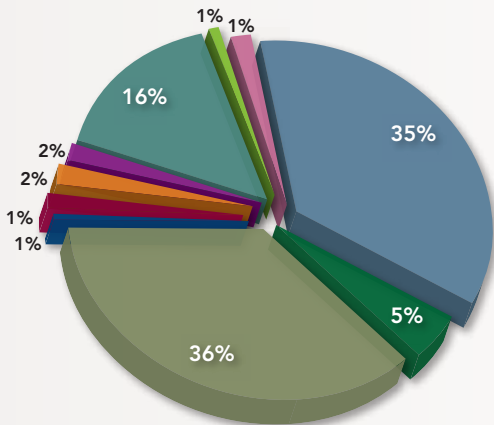
**FY16 Revenues and Balance, \$156,554\***  
(includes fund balances from FY15)



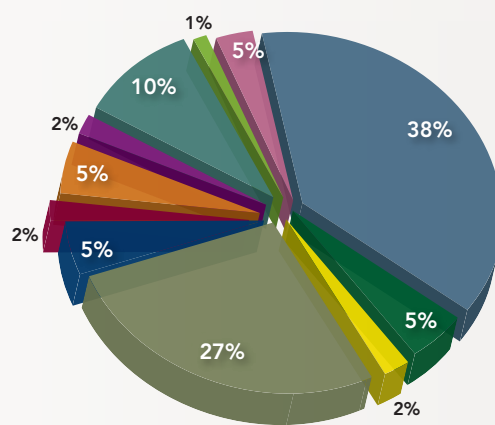
- Walton Family Foundation: Water Policy Education Grant
- Colorado Water Conservation Board Grants
- Fund Balance: Donations + Events
- Tamarisk Coalition Beetle Report
- Private Donor: Fens Research Grant
- Other Grants
- Event Registrations
- Xcel
- Shell Oil Company: Resource Guide Grant + Donation
- Admin + Events

\*The Tamarisk Coalition conference (\$13,589) was not included to show a more realistic picture of Water Center activities.

**FY15 Expenditures, \$94,251\***



**FY16 Expenditures, \$108,804\***



- Travel
- Indirect Costs
- Printing
- Benefits
- Subscriptions and Books
- Overhead\*\*
- Guest Speakers and Professional Fees
- Wages
- Event Food and Drink
- Meeting and Conference Registration
- Student Assistants

\*The Tamarisk Coalition Conference (\$13,589) was not included to show a more realistic picture of Water Center activities.

\*\*Overhead = Supplies, telephone calls, advertising, postage, dues and membership and rent/lease equipment (telephone).



We partnered with the Tamarisk Coalition to provide a tour of the Watson Island riparian restoration site on the Colorado River following the 2015 Upper Colorado River Basin Water Forum.



The CMU Water Center is guided by a diverse group of dedicated water professionals whose goal is to further the knowledge and appreciation of the west's most precious resource.



—Dan Crabtree, Palisade Irrigation District and Hutchins Water Center Advisory Council Chair

### Water Center at CMU Advisory Council

Chair 2015/16: Dan Crabtree, Palisade Irrigation District

Vice chair 2015/16: Ken Neubecker, Western Rivers Institute

Cary Baird, Chevron

Geoff Blakeslee, The Nature Conservancy

Cory Beaugh, Colorado Division of Water Resources

Larry Clever, Ute Water Conservancy District

Lurline Curran, Grand County

Carlyle Currier, Rancher

Bill Edwards, U.S. Forest Service

Steve Fletcher, Fire Mountain Canal and Reservoir Company

Russell George, Colorado Water Conservation Board

David Graf, Colorado Division of Parks and Wildlife

Mark Harris, Grand Valley Water Users Association

Shannon Hatch, Tamarisk Coalition

Mike Higgins, Grand Junction Pipe and Supply

Will Hutchins, Farmer

Kirsten Kurath, Williams, Turner & Holmes, PC

John Porter, Dolores Water Conservancy District

Bruce Smith, Western Water & Land

Chris Treese, Colorado River Water Conservation District

Kirby Wynn, Garfield County



Gigi Richard visiting one of three snow and streamflow monitoring stations on the Grand Mesa.




CMU Environmental Science student Craig Moore preparing to install monitoring equipment on the Grand Mesa.

## 2015/2016 Water Center Grantors, Donors and Sponsors

The Water Center appreciates the support of the following organizations whose generous grants, donations, and sponsorships support research projects and educational and outreach activities. Without this support, our work would not be possible.

		<b>COLORADO</b> Colorado Water Conservation Board Department of Natural Resources	<b>GRANTORS</b>
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<b>DONORS*</b>	<p><b>Lake Powell (\$2,500+)</b></p> 	<p><b>2015 Annual Forum Sponsors</b></p> <p><b>\$2500</b> Chevron North America Colorado Water Conservation Board</p> <p><b>\$1500</b> Denver Water</p> <p><b>\$1000</b> City of Grand Junction Colorado River Water Conservation District Grand Valley Water Users Association</p> <p><b>\$500</b> Eagle River Water &amp; Sanitation Laurian Unnevehr WestWater Engineering Wilson Water Group</p> <p><b>\$250</b> Olsson Associates Western Water &amp; Land Trout Unlimited</p>	<b>2015 ANNUAL FORUM SPONSORS</b>
	<p><b>Cataract Canyon (\$1,000 - \$2,500)</b> City of Grand Junction</p> <p><b>Echo Park (\$500 - \$999)</b> Colorado River Water Conservation District Grand Junction Pipe &amp; Supply Grand Valley Water Users Association Inman Interwest Kilgore Companies Redlands Water and Power Uncompahgre Valley Water Users Association</p> <p><b>Shoshone (\$250 - \$499)</b> Centennial Plastics Fresno Valves &amp; Castings Lyons Gaddis Attorneys &amp; Counselors Munro Companies Netafim USA Regency Wire &amp; Cable Star Pipe Products</p> <p><b>Four Corners (\$100 - \$249)</b> Anonymous Donor Merit Brass Company</p> <p><b>La Poudre Pass (&lt; \$99)</b> Linda Bledsoe Shannon Hatch Hannah Holm</p> <p><small>*The giving levels reflect flows at key points in the Upper Colorado River Basin.</small></p>	<p><b>2016 Water Course Sponsors</b></p> <p><b>\$500</b> Chevron North America City of Grand Junction</p> <p><b>\$250</b> Olsson Associates Rettig Farms Western Water &amp; Land WestWater Engineering Williams Turner &amp; Holmes</p>	<b>2016 WATER COURSE SPONSORS</b>

// The Ruth Powell Hutchins Water Center's report on the tamarisk beetle in the Colorado River Basin has significantly increased our (TC's) ability to communicate issues facing rivers in the west, specifically the impacts of invasive plant species and biological control agents. This report helps us articulate the complexity of those issues to diverse stakeholders, and when communication barriers are reduced on these issues we find it opens up the door to collaborate on solutions to these problems. We look forward to additional scientific and technical reports from the Water Center at CMU. //

—Rusty Lloyd, *Tamarisk Coalition*



RUTH POWELL HUTCHINS  
WATER CENTER

[coloradomesa.edu/water-center](http://coloradomesa.edu/water-center)

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