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A Proposal For:

**Water and the Economy:  
An Economic Analysis of the CSKT  
Flathead Water Compact**

Submitted By:

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Bureau of Business and Economic Research  
The University of Montana**

Submitted To:

**Lake County Community Development Corporation**

**April 23, 2014**

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WATER POLICY INTERIM  
COMMITTEE. 2013-14

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## **Problem Statement**

To say that the proposed water rights settlement negotiated between the Confederated Salish and Kootenai Tribes (CSKT), the state of Montana and the United States has sparked a spirited debate would be an understatement. Given the many connections between water access and individual and collective economic livelihoods this is not surprising. But the decision making process on this important issue has been hampered by the lack of a dispassionate, thorough, integrated accounting of how the economic trajectory of Montana would unfold under each alternative action. The Bureau of Business and Economic Research (BBER) at the University of Montana proposes to address that problem and prepare an analysis that will better inform these important decisions.

## **About the Bureau**

For more than 60 years, the Bureau of Business and Economic Research at the University of Montana (BBER) has been working to help Montanans understand the economy around them and make informed decisions in their personal and professional lives. The Bureau—a research department within The University of Montana-Missoula's School of Business Administration—was founded in 1948 to monitor the state's economic and business conditions. The Bureau has expanded from a staff of four to a research department of 18 full-time employees and more than a dozen part-time workers.

Economists at the Bureau research and collect a wide variety of economic and industry data which assist businesses, government agencies, and individuals across Montana. Several research programs within the Bureau study the statewide industries of forest products, health care, manufacturing, and oil and gas. These programs provide a wealth of information not available elsewhere, and Bureau staff field approximately 6,000 requests each year from people seeking information about topics ranging from inflation rates to county demographics to business startup tips.

## **Objectives**

This study as proposed will ultimately address how the clarification and quantification of water rights as spelled out in the Compact will affect the economy of Montana. In order to achieve this, the study will:

- describe and detail the mechanisms through which water rights affect overall economic activity;
- establish clear, plausible and detailed with- and without-Compact scenarios;
- identify the economic choices likely to be most affected in each alternative;
- quantify the values and costs associated with affected outcomes;
- project and report the aggregate impacts on the future of the economy of the

region and the state.

This study will attempt to draw on the experiences of other areas in similar circumstances, but much of what will be carried out will be original, creative research. In particular, a significant challenge is establishing what the without-Compact scenario would look like. What claims would the tribe file? What would the likely outcome of litigation of those claims be? How would the results of the litigation affect economic choices? How costly would each case be to litigate? To help address these and other legal issues, we have assembled a research team with both legal and economic expertise, as described below.

### **Benefits**

The expected benefits of this research are:

- a better understanding of how water rights in general affect economic activity;
- a clear, plausible and objective assessment of how the accept/reject decision on the Compact will affect economic decisions;
- a quantification of the costs and benefits of decisions regarding the proposed Compact, both from the point of view of individual industries as well as the economy as a whole.

### **Research Plan**

The research will be carried out in four broadly defined steps:

1. **Information gathering.** Reviewing the experiences of other areas faced with changes in water rights, gathering information on the specific circumstances of the Flathead Compact, including irrigation-related investments/upgrades contingent on its approval.
2. **Legal Analysis.** This would address the status of water rights in the event the Compact is not approved, the scope and nature of litigation, the likely outcomes, costs and impact on current uses of water in the region.
3. **Economic Analysis.** This would translate the changes to the legal environment brought about by the Compact's disposition to economic decisions, including litigation, property exchange, property development/investment in new economic capacity, migration, investments in the irrigation project, and the cultivation of certain water-intensive or other crops.
4. **Impact Analysis.** This involves synthesizing all of the results into comprehensive scenarios which are used in conjunction with a policy analysis model (REMI) to project the economic consequences of the decision on approval of the Compact.

## **Products**

The main deliverable for this project will be a written research report containing all of the findings of the research and fully documenting all of the methods used. In particular, the report will contain estimates of the economic impacts of the Compact in terms of employment, income, output, compensation and population that would be the ultimate consequence of its approval. As spelled out above, these findings would represent the synthesis of the legal and economic analysis conducted during the course of the research.

BBER would also present the findings of the project at a time and place of Lake County Economic Development Corporation's choosing.

## **Time Schedule**

As shown graphically in the tables below, the project would take approximately five months to complete. With a start date of May 1, this would result in delivery of the final report by September 19.

There are two intermediate milestone dates during the course of the project. Each of these would involve the BBER research team presenting information to the client.

Two months after the project start BBER would present the detailed with- and without-Compact scenarios. This would be the culmination of research of the legal analysis as well as the review of the experiences of other areas. Since we view the formulation of the without-Compact scenario as critical in the development of economic impacts, we present these findings at an early stage.

Four months into the project BBER will present its initial findings for comment and review.

# Water Compact Economic Analysis Project Timeline

*Project Objective: estimate the economic impacts and potential benefits of approval and implementation of the proposed CSKT Water Rights Compact.*

	5-May	12-May	19-May	26-May	2-Jun	9-Jun	16-Jun	23-Jun	30-Jun	7-Jul	14-Jul
Review literature and past studies on water rights and economic activity	Active	Active	Active								
Develop clear, plausible, and fully-specified with- and without-Compact legal / economic scenarios.			Active	Active	Active	Active	Active				
Milestone #1: Present scenarios							Presented June 19				
Identify economic choices affected and estimate how outcomes would be affected in each scenario.								Active	Active	Active	Active



## **Staffing**

**Bryce Ward**, Associate Director at the Bureau of Business and Economic Research and Director of the Bureau's Health Care Research Program, will serve as the Principal Investigator on this project. Bryce has a Ph.D. in economics from Harvard University and a B.A. in Economics and History from the University of Oregon. His areas of expertise include econometric analysis and applied microeconomics -- including health economics, labor economics, urban and regional economics, public finance, and environmental and natural resource economics. Prior to joining the Bureau, Bryce spent nine years providing expert testimony and policy analysis as a Senior Economist at ECONorthwest, a Portland, OR based consulting firm. He has taught courses in microeconomic theory, econometrics, labor economics, public finance, environmental and natural resource economics, and social economics at Harvard University, Lewis and Clark College, the University of Oregon, and Portland State University. Dr. Ward will supervise all aspects of the project and will serve as the primary author of the final report.

**Professor Michelle Bryan Mudd** [tentative] teaches in the Natural Resources & Environmental Law Program and is Co-Director of the Land Use & Natural Resources Clinic, which works on behalf of Montana governments and is among only a few such clinics nationwide. She has been honored to receive the Garlington, Lohn & Robinson Faculty Teaching Award and the Margery Hunter Brown Faculty Merit Award for her professionalism in the classroom, her research, and her public service.

Growing up in farming and ranching communities in the West, Professor Bryan Mudd was drawn to the fields of natural resources and environmental law. Before joining the law faculty, she worked in private practice representing a variety of clients including local governments, private landowners, non-profits, developers, and affected neighbors and community groups. She brings this diversity of perspective to her scholarship, her teaching, and her work with government clients. Her current research interests include the relationship between land and water use, planning in an age of climate change, the balancing of environmental and land use rights, and the role of public trust in water use.

Professor Bryan Mudd graduated from The University of Montana School of Law with high honors and served as an editor of the Montana Law Review. Prior to law school she was a policy specialist for the Water Resources Center in Bozeman, Montana. She will be focused on the legal analysis as part of this project.

[Note: The involvement of Professory Bryan Mudd is tentative at this time].

**Patrick Barkey** is Director of the Bureau of Business and Economic Research at the University of Montana, a sixty year old organization with a distinguished record of timely, relevant research and information on the state and regional economies. He has been involved with economic forecasting and policy research for more than 30 years, both in the private and public sector. Before coming to Montana he served as Director of the Bureau of Business Research at Ball State University in Indiana for fourteen years. His recent research has been on the economic impact of energy development, the property tax treatment of the telecommunications industry,

and the economic impact of trade with Canada.

The BBER is the state's pre-eminent business research organization. Founded in 1948, the Bureau has been involved with forecasting since its inception, with special attention paid to industries of special relevance to Montana. Since 1975 the BBER has conducted economic outlook seminars in Montana's major cities, and its 40<sup>th</sup> forecasting tour will visit nine cities across the state.

He attended the University of Michigan, receiving a B.A. ('79) and Ph.D. ('86) in economics. Dr. Barkey's focus will be in coordinating the use of the REMI policy analysis ([www.remi.com](http://www.remi.com)) model for this project.

### **Montana Water Stewards**

BBER will depend on the timely response to requests for advice, information and review from the client. In particular, we anticipate that Montana Water Stewards will provide access to key informants (e.g., attorneys or other stakeholders) who may help clarify the how the world with the Compact will differ from the world without the Compact. It is anticipated that the primary data and information needs for this research project can be met from public sources.

### **Budget**

The project can be completed at a cost of \$41,883. This cost primarily reflects the professional time of the researchers involved on the project, which include both wages and fringe benefits. There is a modest budget for travel for consultation and presentation of results. There is also a 5% indirect cost levied by the University of Montana for all externally sponsored projects.

**Water Compact Economic Analysis  
Lake County Community Development Corp.  
5/1/2014 - 10/15/2014**

	<u>Cost</u>
Personal Services	
Wages and Salaries	
BBER Director	\$3,125
BBER Assoc. Director	\$19,792
Law School Professor	\$5,629
Total Wages and Salaries	\$28,546
Employee Benefits	
Contract professionals (31.5% +806/mo)	\$9,435
Faculty (25% )	\$1,407
Total Employee Benefits	\$10,843
<b>TOTAL PERSONAL SERVICES</b>	<b>\$39,389</b>
Operating Expenses	
Travel	\$500
<b>TOTAL OPERATING EXPENSES</b>	<b>\$500</b>
<b>TOTAL DIRECT COSTS</b>	<b>\$39,889</b>
UM CENTRAL ADMINISTRATION (5% of IDC)	\$1,994
<b>TOTAL</b>	<b>\$41,883</b>

**All budgets subject to the approval of UM Research Administration.**

## **Contact**

For any further information on this proposal, please contact:

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