

John S. Church

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Summary of Qualifications

Visiting Assistant Professor, Boise State University

Corporate Economist, Idaho Power Company, Boise, Idaho. 1980 - 1997

Author of detailed Regional Economic and Demographic Forecasts

Member of the Western Blue Chip Economic Forecast Panel

Professional Experience

Corporate Economist, Idaho Power Company, Boise, Idaho. 1980 - 1997

Mr. Church has nearly 20 years of experience in the energy industry. For the past fifteen years, Mr. Church has annually prepared regional economic forecasts as an integral part of long-term utility resource and financial planning. These forecasts included the preparation of economic and demographic forecasts for the state of Idaho and the Idaho Power Company service area. In this role, Mr. Church developed a Regional Econometric Model of the state of Idaho. The model, a simultaneous equation Economic-Demographic model, provides projections of output and employment for the major industries in Idaho, and population (by age cohort and sex), households (by age of head of household and household size), industry average wages and salaries (for major industries in the state) and personal income (by income component) for the state of Idaho and the Idaho Power Company service territory.

These forecasts have proven to be quite accurate, earning Mr. Church the honor of being the most accurate economic forecaster in the Western Blue Chip Economic Forecast Panel in two of the past ten years.

Mr. Church developed a further enhancement to the State of Idaho Economic Forecast with a forecast of economic activity for each of Idaho's forty-four counties. Initially the forecasts of economic activity in each of Idaho's counties was developed as a tool to aid in the spatial evaluation of Idaho Power Company's future human and equipment resource needs in preparation for customer growth. However, these forecasts of economic activity and population and household growth have been widely accepted by the State's business and government communities. Today, these forecasts are used by many private firms and government entities as an integral part of their planning process.

Mr. Church also had past responsibilities for the preparation and analysis of annual electricity sales and load forecasts, as well as forecasts of system peak electricity loads over a 25 year forecast horizon. These economic projections were the basis for forecasts of future revenue, forecasts of power plant operation and future fuel procurement needs, as well as forecasts of the needs for future electricity supply.

Mr. Church has also developed methodologies for the weather normalization of sales that has been used by electric and water utilities for internal financial analysis and use in utility regulatory proceedings.

In other areas of economic forecasting and analysis Mr. Church has developed methodologies for forecasting future coal prices for existing long-term fuel supply contracts. These forecasts have provided clients with a higher degree of accuracy in the budgeting of future operating expenses. In a similar fashion, Mr. Church has prepared, for industrial

clients, forecasts of the monthly and annual utilization of some commonly used inputs materials allowing the client to recalibrate and minimize its inventory expenses.

Mr. Church played an integral role in the evaluation, negotiation, and litigation of long-term fuel supply contracts. He has made recommendations and prepared strategies to overcome particular sticking points in the negotiation process that allowed both parties to capture the economic benefits desired. In addition, the coal price forecasting capability allowed for a timely and detailed economic cost-benefit analysis of negotiating positions and proposals.

Other projects that Mr. Church has participated in include:

The evaluation of the financial and operational impacts of office consolidation and downsizing initiatives.

The evaluation of national and international markets for various types of renewable energy supplies.

The preparation of a scenario analysis of corporate restructuring and downsizing initiatives.

The preparation of studies on the impact of differing energy tax proposals on electric utility operating costs plus, an analysis of the potential effects on operating costs of competing electric utilities in the Northwest.

Development of an extensive country screening methodology for the evaluation of foreign business climates for a client's potential foreign investments. This screening methodology utilized a first phase macroeconomic evaluation to eliminate some countries from further evaluation thereby minimizing the expenses of additional market research or ongoing sales activities in areas that may have poor potential for future market growth.

The preparation of population and demographic forecasts for a client's site location evaluation process. These forecasts provided detailed annual estimates of future population by county, ZIP Code area, age cohort, sex over a twenty year time horizon. Projections of the annual number of births, by age of mother, and deaths by age cohort were also provided for the requested geographic areas.

The preparation of an economic and local government fiscal impact analysis for a large residential planned community in Southwest Idaho.

The preparation of forecasted economic and demographic impacts on the local county and city governments and upon the local school districts in a sparsely populated Idaho County due to the development, construction, and ongoing operation of a \$1.1 billion year-round resort complex.

Prepared an evaluation of the potential economic impacts on four South Central Idaho Counties due to the potential short-term closure of a large food processing plant.

Examined the potential fiscal impacts that could result from a proposal to modify teacher certification standards for Idaho's elementary and secondary public school teachers.

Prepared forecasts of the number of customers by geographic area, customer water usage by class of customer, water losses, utility company internal use, and water used for hydrant flows by month for a major water utility.

Prepared a economic and fiscal impact analysis for a \$1.4 billion coal-fired electric generating plant proposed for South Central Idaho.

Prepared an economic and fiscal impact analysis of a phosphate fertilizer plant and phosphate mine located in Southeast Idaho on the Idaho and western Wyoming economies.

Mr. Church has also prepared and presented testimony to utility regulatory agencies and in state and federal courts.

As a well-known economist, Mr. Church has made numerous speeches and presentations to private, government, and civic organizations throughout Idaho and the Northwest. Over the last five years, the total annual audience, at speeches and presentations by Mr. Church has averaged nearly three thousand per year. Often asked by the news media for comments and opinions on the current economic environment, Mr. Church is frequently quoted in the local Idaho print and television media and has also been cited in national publications such USA Today, Newsweek, Time, The Kiplinger Washington Letter, and The Wall Street Journal.

Education

University of Idaho 1979 - 1981

Moscow, ID

Major: Economics, MS degree.

Boise State University 1976 - 1979

Boise, ID

Major: Business Administration, Minor: Economics, BBA degree

University of Washington 1967 - 1971

Seattle, WA

Major: Civil Engineering, Minor: Mathematics

Selected Publications and Presentations:

Annual economic outlook presentations for the state of Idaho to the Joint Select Committee on Revenue Projections of the Idaho State Legislature, January of the years 1983 - 1986 and 1988 - 2005.

Member of the Boise Visions Project Planning Committee. (City of Boise's Comprehensive Planning Project), and Liaison to the Boise Visions Executive Committee for the Utility and Water Planning Subcommittees, 1992

Member of the Ada Planning Association Demographic Advisory Committee: 1991, 1995, and 1997.

Economic Outlook Presentation to Boise Chamber of Commerce Executive Retreat, Sun Valley, Idaho, Sept. 1994

Kick-Off speaker, Idaho Manufactured Housing Association Annual Convention, Boise, ID, Annually 1991 - 2004.

Panelist, Boise Chamber of Commerce's Annual Economic Outlook Breakfast, Annually 1991 - 2003.

Keynote speaker, Idaho Building Operators Association Annual Meeting, Sun Valley, Idaho, April 1998.

Keynote speaker, Idaho Hispanic Business Association Annual Meeting, Boise, Idaho, April 1998.

Panelist, Caldwell, Idaho Chamber of Commerce's Economic Outlook Breakfast, November 1998.

Keynote speaker, Franklin Building Supply's Contractor's Economic Outlook Forum, Boise, January 2001, 2002

Keynote speaker, D.L. Evans Bank Economic Outlook Forum, Boise, February 2001, 2002, 2003, & 2004.

Keynote speaker, Idaho Building Operators Association Annual Meeting, Boise, March 2001.

Keynote speaker, Nampa, Idaho Chamber of Commerce's Economic Outlook Breakfast, January 2002.

Keynote speaker, Idaho Mortgage Banker's Association, Boise, April 2002, April 2003, March 2004

Speaker, Idaho Department of Transportation's, Transportation 2020 Conference, Boise, March 2000.

Columnist, Quarterly Reviews of Idaho's Economy for the Idaho Statesman, Boise, Idaho

Economic Consulting and Forecast Clients:

Agrium U.S.A.	Boise Metro Chamber of Commerce
City of Boise, Idaho	CH2M Hill
Farmers and Merchant's State Bank	Goldman Sachs
Idaho Department of Water Resources	Idaho State Attorney General's Office
Idaho Small Business Development Center – Pocatello	Idaho Power Company
Intermountain Gas Company	Magic Valley Regional Medical Center
Northwest Research Group	Power Engineers
St. Lukes Regional Medical Center	United Water Idaho
SunCor Idaho, LLC	Idaho Department of Education
Holland and Hart, LLC	ISBDC - Pocatello
Browning Ferris Industries (BFI)	Idaho Hospital Association
Tammarack Resort	Sun Valley Development L.L.C.
INEEL	-Warm Springs Ranch Development
Community Planning Association of Southwest Idaho (COMPASS)	JR Simplot Company
	SunCor – Idaho, LLC

Additional Professional Activities:

Instructor, Department of Continuing Education, Boise State University: 1986 – 2000
Visiting Assistant Professor, Department of Economics, Boise State University: 2000 – Present

Past Users of State and County Economic Forecasts Prepared by John Church:

Idaho Chambers of Commerce:

Blackfoot Chamber of Commerce	Moscow Chamber of Commerce
Boise Area Chamber of Commerce	Mountain Home Chamber of Commerce
Bonner County Economic Development	Nampa Chamber of Commerce
Caldwell Chamber of Commerce	Ontario Chamber of Commerce
Coeur d'Alene Chamber of Commerce	Payette Chamber of Commerce
Eagle Chamber of Commerce	Pocatello Chamber of Commerce
Grangeville Chamber of Commerce	Rexburg Chamber of Commerce
Homedale Chamber of Commerce	Soda Springs Chamber of Commerce
Idaho Falls Chamber of Commerce	St. Anthony Chamber of Commerce
Jerome Chamber of Commerce	Twin Falls Chamber of Commerce
Lewiston Chamber of Commerce	Washington County Economic Dev.
Meridian Chamber of Commerce	

Past Users of State and County Economic Forecasts Prepared by John Church:

State & Local Government:

Ada County, Ada County Sheriff
Ada Planning Association
Boise City Economic Development, Planning &
Zoning, Police Department, & Public Works
Blaine County Planning & Zoning Commission
Boise County Planning & Zoning
Boise Neighborhood Housing Services
Boise State University
Caldwell, City of
Canyon County Planning and Zoning
College of Southern Idaho
Custer County Planning & Zoning
Elmore County Planning & Zoning
Emmett, City of
Filer, City of
Idaho State Government: Departments of:
Agriculture, Corrections, Commerce, Education,
Financial Management, Law Enforcement
Transportation, Tax Commission, & Water Resources
Idaho Falls, City of
Idaho Housing Agency
Idaho State University
Idaho Supreme Court
Malheur County Planning and Zoning
Mountain Home, City of
Nampa City Hall
State of Nevada, State Demographer's Office - UNR
Nez Perce County Planning
Nyssa, City of
Ontario, City of
Payette County Planning and Zoning
Pocatello, City of
Port of Lewiston
Twin Falls, City of
University of Idaho
Washington County Planning and Zoning
Valley County Planning & Zoning

Private Sector:

Albertsons Inc.
Associated Food Stores
Bank of America - Boise, Los Angeles, San Francisco
Bannock Regional Medical Center
BMC West
Caldwell Economic Development Project
CHQSA Architects
Consolidated Supply
Cornerstone Research
Davis, Wright, Tremaine
DBSI Realty
Dow Jones Co., New York
Dun & Bradstreet, New Jersey
Foodmaker, Inc
Global Travel
Group Health Northwest
Henkle-Buchanan Group
Holland & Hart
IDA-ORE Economic Development
Idaho State Journal
Intermountain Gas Company
Intermountain Health Care
International Strategies
JUB Engineers
Kootenai Electric - Coop.
Kootenai Regional Medical Center
KTVB
Lockheed Martin Idaho Technologies
Magic Valley Regional Medical Center
Marples Business Newsletter
Medical Center Physicians
Medical Service Bureau
Moody's Investor Service
Mountain States Appraisal
O'Neill Enterprises Inc.
Pocatello Regional Medical Center
Post Register - Post Falls
St. Alphonsus Regional Medical Center
St. Lukes Regional Medical Center
U.S. BanCorp
United Water - Idaho
US West
Valley Medical Center
Washington Federal Savings
Washington Water Power
Wausau Insurance Co.
Wm. Clark Planning & Development

Outline of Facts and Opinions

John Church

M3 Eagle Water Right Application No. 63-32575

November 25, 2008

Background and experience as an economist.

I am president of Idaho Economics, an economic consulting firm located in Boise, Idaho. The firm's mailing address P.O. 45694, Boise, Idaho 83711. I am an independent economic consultant and a visiting assistant professor in the Economics Department at Boise State University. I have a Bachelor of Science degree in civil engineering from the University of Washington, a Bachelor of Business Administration degree from Boise State University, and Master of Science degree in economics from the University of Idaho. Prior to becoming an economic consultant I was corporate economist for Idaho Power Company in Boise, Idaho.

I have 17 years of professional experience at Idaho Power Company as corporate economist and 8 years experience as an independent economic consultant. I have experience in building economic models and performing economic impact analysis studies. I have constructed and maintain a long-term economic forecasting model for the purpose of forecasting economic activity and demographic characteristics of the state and each of Idaho's forty-four counties. The output of this economic forecasting model is regularly used various clients around the state of Idaho for their long-term business and resource planning needs. In addition, I have experience in the economic valuation of long-term resource purchase contracts, the economic evaluation of decision alternatives, economic modeling of local area impacts resulting from transportation improvement projects, and the economic modeling and forecasting of long-term demand and supply for elementary and secondary education teachers.

I have prepared economic impact studies for the Idaho National Engineering and Environmental Laboratory (now the Idaho National Laboratory), resorts, planned communities, location decisions by manufacturing, utility, and service industry firms, expansion decisions by manufacturing firms. For many economic impact studies I have also prepared fiscal impact studies for site or regulatory approval. I have prepared and presented sworn testimony before state regulatory authorities, legislative committees, and to state and federal courts.

Some of my recent economic consulting clients include: Idaho Power Company, Intermountain Gas Company, St Lukes Regional Medical Center, Hecla Mining Company, Agrium USA, the Idaho Mining Association, Developers Diversified Realty, and M3-Eagle LLC.

I have attached a copy of my resume.

The analysis for M3-Eagle entitled “M3-Eagle Development: Demographic Forecast and Economic and Fiscal Impact Analysis”

This is an analysis I prepared for the M3-Eagle development.

The primary objective of the analysis was to estimate the fiscal impact that the M3-Eagle development would have upon those public service providers that would be affected by the development.

Specifically, those public service providers were deemed to be: Ada County, the City of Eagle, the Meridian Joint School District #2, the Eagle Fire District, the Ada County Highway District, Ada County Emergency Medical Services, Ada County Weed and Pest Control as well as the Mosquito Abatement District.

Because most of the additional costs that the M3-Eagle development would impose on these public service providers is a function of the additional population that the development would have it was necessary to forecast the population and its demographic characteristics.

However, an examination of the additional costs that the M3-Eagle development would impose upon these public service providers is an incomplete picture without also examining the additional revenues that would be forthcoming from taxes and fees paid by the residents of M3-Eagle.

Annual estimates of the additional costs that each public service provider would experience were made. In addition, annual estimates of the additional revenue that the M3-Eagle development would generate for those affected public service providers were made. These annual estimates of additional costs and the estimates of additional revenues were compared for each year of the projected twenty year time horizon to full build out of M3-Eagle to determine if the development would impose a burden upon the existing tax paying population.

The method used to make the projections of the M3-Eagle population and its demographic characteristics.

The population and household demographic projections performed for M3-Eagle Development were prepared so as to accurately reflect the anticipated future composition of the development.

The analysis used population, household, and demographic parameters from the 2000 Census of the local population in order to capture the demographic composition of the population that may be likely to reside with the M3-Eagle Development.

However, in order to realistically reflect the potential future population one should match the characteristics that the proposed community will possess with communities or neighborhoods with similar attributes in the local area. Some of the important characteristics that are envisioned for M3-Eagle Development and that are important for drawing comparisons to the demographics of other areas locally are the types of homes in the community and the number of homes of each type, and the projected selling price of each type of new home in the development, and the number of multi-family homes in the development.

While it is known that marketing efforts directed to target a certain demographic may change the future composition of the population in the development they may not capture that market segment. The fundamental truth may be that the underlying characteristics of the population from which the community's new residents are to be drawn will be the determining factor which represents the basis of its future demographic composition.

The homes proposed within M3-Eagle vary in size, amenities, and price. The M3-Eagle development envisions that there would be, at full build-out of the project, nearly 5,316 residences that would typically be classified as "single family detached" homes. These are the traditional one-residential-building-is-equal-to-one-household home and would account for 65.1 percent of the nearly 7,153 residences that are anticipated to be built over the twenty year build-out of the project.

Housing statistics from the 2000 U.S. Census reveal that, on average, "single-family detached" homes represented 67.5 percent of the total housing stock in Ada County. The proposed housing mix for the M-3 Eagle development is similar. Multi-family housing units within M-3 Eagle Development are slated to account for the remaining 34.9 percent of the development's residential housing stock.

While census figures show that nearly 74.4 percent of the City of Eagle's housing is "single-family detached," the lower number for M3 Eagle is reasonable given its size and the fact that it is a planned community that is intended to provide for a variety of ages and lifestyles.

Another factor that was considered in constructing the projections of the future population and demographics of the M3-Eagle development was the price of the residential homes that are proposed to be built in the project. Home prices can act as a filter of the population such that future residents of the M3-Eagle community may not have a different demographic composition from that found in the City of Eagle or that found in Ada County as a whole.

Because of these factors it was decided that utilizing 2000 Census demographic averages drawn from the City of Eagle or from Ada County as a whole would not accurately reflect or predict the future population and its demographic characteristics within the M3-Eagle development. In order to more accurately predict the future population and its composition within the M3-Eagle development a search was made for smaller areas of Ada County where the composition of the housing stock (single-family versus multi-

family) and the value (price) of that housing stock more accurately reflected the future conditions envisioned for the M3–Eagle Development.

Smaller geographic areas of the County were screened and eight areas were selected. For these eight areas population and demographic statistics from the 2000 Census were assembled for an area one-half mile in diameter centered on a judgmentally determined central point within this smaller "surrogate area". Again, these "surrogate areas" are small residential areas of the County that appear to have characteristics that are similar to the residential housing proposed for the M3–Eagle development.

The choice of these "surrogate" residential areas was based upon them having a similar proportion of multi-family housing, having single family residential housing of newer vintage, housing with the characteristics of similar size and value, and housing within residential developments with a degree of amenities that may be comparable to those that will be found in M3–Eagle. The selected "surrogate" residential areas were then examined using data from the 2000 US Census to develop a profile of the population and households therein. These profiles were then utilized to construct a composite profile of the future population and household characteristics of the M3–Eagle project.

The demographic profiles of these eight "surrogate areas" in Ada County chosen to represent the future composition of the M3–Eagle Development, as well as a comparison of the population and demographic characteristics of the United States, the State of Idaho, the Boise MSA, Ada County, the City of Boise, and the City of Eagle, can be found in Appendix A of the M3-Eagle Development: Demographic Forecast and Economic and Fiscal Impact Analysis report.

The M3-Eagle development can be absorbed by the projected housing market in the Boise MSA.

The M3-Eagle development, consisting of 7,153 housing units, is envisioned to take twenty to thirty years to complete.

While the size of the M3-Eagle development is not something seen before in the Boise MSA housing market, the long-term planning horizon to completion also is a new phenomenon here. But planning such developments as a whole, rather than proceeding toward the same overall numbers in a piecemeal fashion, is a prudent approach to managing growth. This is because projections, including economic projections, can be made at the outset and decisions can be made early on to accommodate specific amounts and locations of development.

In order to put the proposed 7,153 housing units in the M3-Eagle development in perspective realize that would be, on average, the addition of 358 housing units per year over a projected twenty year build-out. Alternatively, that is a pace of about 29 homes a month.

Over the period 1970 – 2000, and here I have deliberately left off the recent (2004- 2006) strong surge in housing additions, Ada and Canyon counties added 108,331 housing units (81,371 in Ada County and 26,960 in Canyon County). The proposed housing additions of the M3-Eagle development would only represent 6.6 percent of that historic experience.

The proposed average annual M3-Eagle housing unit additions, an annual average pace of 358 units per year, would have represented less than one month of housing additions in the City of Meridian in 2004, 2005, or 2006.

I believe the M3-Eagle development is not too big for the market, and the 30-year planning horizon appears appropriate.

The implications to the M3-Eagle proposed planning horizon due the current economic downturn in the residential housing market.

Again, the M3-Eagle development is envisioned to take twenty to thirty years to complete. Housing markets have their ups and downs. However, I know of no evidence to support the conclusion that this slowdown today is the starting point for a long-run decline in the overall population of the Boise MSA. And even if it were, and even if that resulted in the M3 Eagle project failing to realize its full development, this then would mean that the end of the planning horizon was reached with the project needing a license for less ground water than it originally was projected to need.

In my opinion, the current slowdown in housing demand will abate and another upswing will be forthcoming. As a matter of fact, the Ada and Canyon County housing unit additions over the period 1970 – 2000 that I previously mentioned had arguably the largest economic recession that the State of Idaho has ever experienced and one of the largest housing market slowdowns during the 1980 – 1982 national recession.

That is a very positive point about taking the long view as M3 has with this development. Even if twenty years were projected to full build-out of the M3-Eagle development, this time period in itself makes clear that M3 expects there will be ups and downs in the housing market as the project goes forward.

The future needs water rights application seeks a 30 year planning horizon sought in the water right application compared to M3-Eagle's best case of 20 years to full build-out.

A thirty year horizon for the water rights application appears to me to be the prudent course of action, even though a case can be made that build-out will occur in 20 years.

This water rights application seeks a planning horizon of thirty years. It is not the longest time-horizon for a water rights application. Economic and population projections that I made for United Water in their IMAP application were made with an anticipated 50 year horizon. Of course, the 50-year horizon is for a company obligated to serve new users

within a continually expanding service area, whereas M3 Eagle proposes a planned community within specified boundaries. Therefore, its planning horizon is much more appropriately set within a somewhat smaller timeframe.

I believe that M3-Eagle's 30 year planning horizon to fully develop the water rights it seeks under the application is reasonable and prudent for three reasons: first, the M3-eagle development is anticipated to take at least twenty years until full build-out; second, at least substantial portions of the infrastructure necessary for the project (including the water supply system) will have to be put in place prior to any residential housing units are sold or occupied; and third, the housing market has its ups and downs, and it is prudent to provide some flexibility for those potential fluctuations.

The M3 Eagle future needs/planning horizon application is one of only three such applications I have seen, the other two being that mentioned previously for United Water Idaho and the future needs application approved several years ago for Tamarack. As an economist, I find such an approach to land and water supply planning to be prudent and in furtherance of good decision-making by both the public and the private proponent.

Projections of future residential water demand in M3-Eagle.

I have reviewed the applicant's projections of future residential water demands as they are shown in the application at Exhibit 5.7 and found them to be reasonable. On page 3 of Exhibit 5.7 of the application it is projected that the annual indoor potable water needed for the 7,153 residences planned for M3-Eagle will be 956 million gallons, an annual average of 133.23 thousand gallons per residential customer. In 2005, I co-authored a water demand analysis for United Water Idaho, and am familiar with long-term forecasting methods for utilities. I also have reviewed United Water's annual reports of water use on file with the Idaho Public Utilities Commission. The projected annual average water use per residential customer for the M3 Eagle project is not dissimilar from United Water's average annual water use per residential customer for the years 2005-2007 of 135.17 thousand gallons, or an average of 370 gallons per day per residence on a year-round basis. In United Water's system, many of these customers would be using water for irrigation as well as in-house uses, and M3 Eagle's figures exclude irrigation.