GARY R. HERBERT
Governor
GREG BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Water Rights

MICHAEL R. STYLER
Executive Director
KENT L. JONES
State Engineer/Division Director

ORDER OF THE STATE ENGINEER
For Permanent Change Application Number 09-462 (a35874)

Permanent Change Application Number 09-462 (a35874), hereafter "the application," in the name of the San Juan County Water Conservancy District, was filed on August 27, 2009, to change the point of diversion, place of use, nature of use, and storage of 24,000 acre-feet of water as evidenced by Water Right Number 09-462. Heretofore, the water was to have been diverted from the San Juan River located North 1100 feet and East 2300 feet from the SW Corner of Section 26, T41S, R19E, SLB&M. The water was to be used in all or portion(s) of Section 7, T42S, R19E, SLB&M for steam power generation at a coal-fired power plant.

Hereafter, it is proposed to divert 24,000 acre-feet of water from the Green River at points of diversion changed to: (1) South 1200 feet and East 455 feet; (2) South 1500 feet and East 474 feet; (3) South 300 feet and East 72 feet; (4) South 900 feet and East 397 feet; and (5) South 600 feet and East 324 feet, all from the NW Corner of Section 22, T21S, R16E, SLB&M. The water will be stored in a new reservoir from January 1 to December 31, having a capacity of 2,000 acre-feet, a dam height of 30 feet, and inundating 100 acres in all or portions of Sections 11 and 12, T21S, R15E, SLB&M. The nature of use of the water is being changed to steam power generation at the Blue Castle Nuclear Power Plant Project. The place of use of the water (location of the generating facilities) is being changed to all or portions of Section 2, T21S, R15E, SLB&M. The applicant, San Juan County Water Conservancy District (SJWCD), is leasing the water right to Blue Castle Holdings (BCH), developer and licensing agent for the project.

This change application was filed pursuant to Utah Code Ann. §73-3-3 and is a companion filing to Permanent Change Application Number 89-74 (a35402). The total volume of water sought to be changed for the project under both applications is 53,600 acre-feet. In clarifying the application, BCH submitted information stating the plant would require about 70 cubic feet per second (cfs) of flow and all water diverted would be fully depleted.

Notice of the application was published in the Emery County Progress on September 15 and 22, 2009, and in The Times-Independent on September 17 and 24, 2009. Protests were received from: United States Department of the Interior, Bureau of Reclamation; United States Department of the Interior, Fish and Wildlife Service; Uintah Water Conservancy District; Grand County Council Members; Green River Canal Company; Green River Cooperative; Green River Companies; Tim Vetere; Jay Vetere; Greg Vetere; Nancy Dunham, Dunham Land and Livestock; Chris Dunham, Dunham Farms; Curtis and Kerry Rozman, Ruby Ranch; Lee Thayn; David Erley; Joni Pace (late protest); Pamala R. Hackley; William H. and Geniel Reay (late protest); Mitchell B. Vetere; Center for Biological Diversity; Utah Rivers Council; HEAL Utah; Living Rivers and Uranium Watch; The Sierra Club, Utah Chapter; Red Rock Forests; Western Resource Advocates (late protest); and Dee Holladay, Holiday Expeditions, Inc.

An informal administrative hearing was held on the application January 12, 2010, in Green River, Utah. Many protests to the application referred to the statutory criteria for approval or rejection of an application contained in Utah Code Ann. §73-3-8(1), provided their views of the approval criteria, and argued the application should not be approved. Other concerns raised in the protests related to storage water releases from Flaming Gorge Reservoir and proposed rehabilitation work on Tusher Wash Diversion Dam. The applicant provided testimony at the hearing arguing that the application meets all criteria for approval. Both the applicant and protestants submitted additional written information after the hearing.

Action on change applications by the State Engineer is governed by the provisions of §73-3-3, which provides that change applications be limited and conditioned such that impairment of existing rights does not occur. Subsection (5)(a) requires the State Engineer follow the same procedures as provided for applications to appropriate water. The approval criteria for such applications are contained in Utah Code Ann. §73-3-8(1), which states:

> ***(1) (a)*** *It shall be the duty of the state engineer to approve an application if:*
> *(i) there is unappropriated water in the proposed source;*
> *(ii) the proposed use will not impair existing rights or interfere with the more beneficial use of the water;*
> *(iii) the proposed plan is physically and economically feasible, unless the application is filed by the United States Bureau of Reclamation, and would not prove detrimental to the public welfare;*
> *(iv) the applicant has the financial ability to complete the proposed works; and*
> *(v) the application was filed in good faith and not for purposes of speculation or monopoly.*
>
> ***(b)*** *(i) If the State Engineer, because of information in the state engineer's possession obtained either by the state engineer's own investigation or otherwise, has reason to believe that an application to appropriate water will interfere with its more beneficial use for irrigation, domestic or culinary, stock watering, power or mining development, or manufacturing, or will unreasonably affect public recreation or the natural stream environment, or will prove detrimental to the public welfare, it is the state engineer's duty to withhold approval or rejection of the application until the State Engineer has investigated the matter.*
> *(ii) If an application does not meet the requirements of this section, it shall be rejected.*

The State Engineer has carefully reviewed the application, the information provided in the various submittals prepared in support and in protest of the proposed project, the information provided at the hearing, the written testimony submitted after the hearing, and has conducted additional investigation as directed by statute. The standard by which the State Engineer evaluates applications seeking approval is the "reason to believe standard" outlined in *Searle v. Milburn Irrigation Co., 2006 UT 16, 133 P.3d 382.*

The proposed project presents some unique circumstances, which has led to significant consideration and study of the issues outlined under the criteria in §73-3-8, particularly as they relate to public welfare and the natural stream environment. This project, if constructed, would be Utah's first nuclear power plant. The regulation and development of nuclear energy in the United States is heavily regulated under Federal law and administrative practice. The State Engineer expended considerable effort to develop an understanding of the relationship of Federal law and duties of the State Engineer under State law. Further, the proposed project presents issues of first impression. For example, it represents significant water development under applications originally approved nearly five decades ago, held without any development or use of water under protections of Utah law by public entities to meet the reasonable future water requirements of the public, and leased for a long period of time - perhaps the next 5 decades or more - to a private entity outside the service area of the public entities. The proposal raises questions related to public welfare, the more beneficial use of water, and to the Federal Endangered Species Act.

All of these issues along with the State Engineer's analysis are summarized and discussed in the following subsections of this Order, which are listed by the individual criterion of Utah Code Ann. §73-3-8(1).

§73-3-8(1)(a)(i) Unappropriated Water in the Proposed Source

Several protests claim that there is insufficient unappropriated water in the proposed source, which is the main stem of the Green River, located near the City of Green River, Utah. The Green River is tributary to the Colorado River and the Green River drainage is a major part of the Colorado River Basin. The protests are summarized into three general areas of concern as follows:

Colorado River Allocation

Protestants contend that the Colorado River Basin is over-appropriated and that the original Colorado River apportionment exceeds the annual average flow of the river. The change application was protested on the grounds that development of it will cause Utah to exceed its allowable depletion limits allotted under the Colorado River Compact.

Summary of Investigation

The Colorado River is managed and operated under compacts, Federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the "Law of the River." When the Colorado River Compact of 1922 (Compact) was negotiated, the river's average annual flow from 1896 to 1921 was thought to be about 17 million acre-feet. Recent evaluations show the river's naturalized flow[1] to be about 15.0 million ac-ft over the period 1906-2008.[2]

[1] Data from 1921 to present can be obtained from the USGS (the gage is named USGS Station Number 09380000 Colorado River at Lees Ferry, AZ).

[2] U.S. Department of the Interior, Bureau of Reclamation. 2011. *Interim Report No. 1, Colorado River Basin Water Supply and Demand Study, Status Report.* p. SR-2

Utah may deplete 23% of the flow allocated to the Upper Colorado River Basin States (Utah, Colorado, Wyoming, New Mexico and Arizona). The Compact apportions to the Upper Basin States 7.5 million acre-feet of depletion per year provided that an average of 7.5 million acre-feet per year is available to the Lower Colorado River Basin States and treaty obligations to Mexico are satisfied. Considering current hydrology, Mexican treaty obligations, and other law of the river issues, Utah's share of the river is currently assumed to be about 1.4 million acre-feet per year.

To date, the Upper Basin States have met all of their downstream obligations under the Compact and Law of the River. It is estimated that Utah water users currently deplete approximately one million acre-feet annually, which represents an underutilization of Utah's share of the Colorado River allocation. The underlying water right associated with this change application is an approved appropriation that has not yet been developed. Approval of this change application does not constitute a new appropriation of water within the Colorado River Basin although it does constitute a new diversion demand on the Green River, which is part of that Basin.

The Upper Colorado River Basin Compact of 1948, Article IV, provides for curtailment of use by the Upper Basin States in the event they cannot meet the requirement outlined in Article III(d) of the Colorado River Compact. Curtailment quantities and timing are to be determined by the Upper Colorado River Commission based on the principles outlined in Article IV. Each State will administer curtailment within its own borders. Although Utah is not currently using its full apportionment of the Colorado River, State Engineer water right records indicate over 2 million acre-feet of depletion is potentially possible if all approved applications and water rights of record were to be fully developed and put to use. The State Engineer cannot rule out the possibility that curtailment may be necessary in the future but notes that, whether implementation of curtailment procedures is the result of hydrologic factors or increases in water use, its implementation would be a reflection that Utah is placing to beneficial use the maximum amount of water possible under the Law of the River. The State Engineer believes that result is consistent with Utah statutory objectives and water policies.

Utah has and will continue to meet its Compact obligations on the Colorado River. The approval of this change application does not guarantee the applicant water in the future except as may be available to the applicant under the priority date of the water right underlying this application. Should curtailment under the Compact be necessary, this application, like all others in the Colorado River Drainage in Utah, is subject to priority distribution under the direction of the State Engineer. Even though under curtailment conditions water rights will be administered based on priority, the possibility that rights might be curtailed is not a reason to deny this application.

Substantial water resource development work has been completed throughout the Colorado River Basin to place water to beneficial use. Significant storage projects, federal, state and private, have been constructed since 1922 that currently allow for storage of four times the mean annual

flow of the river.[3] The flexibility provided by storage reservoirs in capturing above-average flows on good water years allows the Upper Basin States to meet their Compact obligations to the Lower Basin States during drier periods.

Local Appropriation of the Green River at Green River, Utah

Water users in and around the City of Green River, Utah, are concerned about the availability of water at their diversions. Some water users indicate that they occasionally have difficulty diverting water from the river to fill their rights.

Summary of Investigation

The Green River in the vicinity of the City of Green River, Utah, has never been regulated by priority due to a shortage of water. The annual mean flow of the Green River, as measured at USGS Station Number 09315000 at Green River, Utah for the full historical record of the station (years 1895-99 and years 1906-2010) is 6,048 cfs with an annual mean volume of 4,381,000 acre-feet.[4] Based on the historical flow records at this station, there has always been sufficient water for this application to be diverted at the defined points of diversion.

To illustrate the availability of water on the Green River, there are approximately 139 approved water rights for irrigation, municipal, or industrial use from the Green River with points of diversion located between the confluence of the Price River and the confluence with the Colorado River. The total of water rights that consume all or part of the water diverted in this segment of the river are approved to divert approximately 400 cfs or 125,000 acre-feet of water. The estimated total depletion from these diversions is 56,500 acre-feet. The major water users along this stretch of the Green River are agricultural in nature which result in large return flows to the river. If all of the existing approved or certificated rights were currently in use, the total depletion to the Green River would be about 1.29% of the volume measured at the Green River station. However, almost all of these depletions occur above the USGS Green River station and represent depletions of water additional to the volumes of water measured there. Although flows less than 500 cfs have been measured at the Green River gauge, it has never been necessary to regulate Green River water rights by priority.

The volume of water being sought under this application is 24,000 acre-feet. Cumulatively, the volume of water associated with this project under both change applications would equate to 53,600 acre-feet, or a continuous flow diversion of about 74 cfs. The additional depletion of water from the Green River to supply this project would be about 1.22% of the annual mean volume of the river using data from the USGS Green River station.

In investigating the issues of water users having trouble diverting water from the river to fill all of their rights, it appears that the problems being experienced by local water users are not caused by insufficient water in the river to fill their rights, but rather are related to deficiencies in

---

[3] Bureau of Reclamation. 2011. *SECURE Water Act, Section 9503(c) – Reclamation Climate Change and Water 2011.* p. 19

[4] USGS. 2010. *Water-Data Report, 2010, 09315000 GREEN RIVER AT GREEN RIVER, UT*

diverting works that are unable to efficiently capture the river's flow. Water users have a responsibility to maintain their diversion structures to divert the water they are entitled to.

Climate Variability

The future availability of water is also questioned with protests citing the possible negative effects of potential greater climate variability. Several of the protests cited climate model studies that predict a possible 10-30% reduction in stream flow runoff to the Colorado River Basin by 2050.

Summary of Investigation

Stream flow estimates for the Colorado River Basin, some reconstructed from tree ring records spanning hundreds of years, appear to show greater variability in the hydrologic cycle than what has been documented in the historical record of flow measurements.[5] The reconstructed flow record appears to show periods of extreme drought sustained over longer periods of time than any drought documented since the late nineteenth century.

Climate projection models appear to predict a wide range of future climate conditions. Predictions from current models range from a slight increase in Colorado River Basin precipitation to a greater than 30% decrease in annual runoff.[6] The State Engineer is not aware that any available predictive model has been scientifically validated as a definitive predictor of future conditions.

1(a)(i) Section Conclusions

Water right laws in Utah were written specifically to address shortages in water supply and establish a priority system to protect senior rights during times of shortage. Many streams within the State of Utah have early decreed water rights for volumes of water far in excess of what the streams typically produce on any given year. In times of physical water shortage, water rights in Utah are regulated according to the prior appropriation doctrine. As stated in statute, *"the one first in time shall be first in rights,"* §73-3-1 Utah Code Ann. On many streams, River Commissioners maintain an orderly priority-driven distribution of water. The prior appropriation doctrine is the statutory directive used by the State Engineer to address variability in water supply whether it is a seasonal shortage, annual shortage, potential Compact shortage or the potential for reduced water supply due to greater climate variability.

The State Engineer believes that there is unappropriated water in the source, which can be diverted and beneficially used by the applicant.

---

[5] Meko, D.M., C.A. Woodhouse, C.A. Baisan, T. Knight, J.J. Lukas, M.K. Hughs, and M.W. Salzer. 2007. *Medieval Drought in the Upper Colorado River Basin.* Geophysical Research Letters 2007 34(5), L10705, doi: 10.1029/2007GL029988.

[6] Bureau of Reclamation. 2011. *SECURE Water Act, Section 9503(c) – Reclamation Climate Change and Water 2011.* p. 25-36; see also: National Research Council. 2007. *Colorado River Basin Water Management – Evaluating and Adjusting to Hydroclimate Variability.* The National Academies Press. p. 85-91

§73-3-8(1)(a)(ii) Not Impair Existing Rights or Interfere with the More Beneficial Use of Water

A number of protests cited this criterion asserting that approval of this application would impair existing rights and interfere with the more beneficial use of the water. The protests are summarized as follows:

Impairment of Existing Rights and Change in Drainage Basins

The application was protested on the grounds that it may interfere with existing approved and certificated water rights on the Green River. Another concern raised in the protests was whether moving a point of diversion from the San Juan River to the Green River is allowable under current water right laws, regulations, and policies.

Applicant's Statement

The applicant indicated that the proposed points of diversion for this project will be located downstream from all major diversions on the Green River and cannot physically interfere with the majority of water rights on the river. As for the few water rights located below the project, the applicant believes there is sufficient flow in the river to preclude interference with those rights.

BCH states that a primary purpose for the on-site reservoir is to store water for the low flow time of year. BCH asserts that there is no Nuclear Regulatory Commission (NRC) requirement to constantly withdraw water from the river and that the only regulatory requirement related to this issue is to have water available for all types of operations, including for safe shutdown and cooling of the plant. BCH believes the proposed 2,000 acre-foot reservoir provides assurance for meeting such requirements. If a drought period extends beyond the operational capacity of the reservoir, the reservoir water would be used to shut down the plant until sufficient water is again available to resume operation.

Summary of Investigation

The State Engineer has authority to reject an application to appropriate water if it will impair existing rights. When considering a change application, it is not to be rejected for the sole reason that the change would impair a vested right. A change application may be approved with conditions designed to mitigate impairment or provide compensation to the affected party (see UCA §73-3-3(7)).

Water Right 09-462 lapsed in the year 2000, was reinstated as the result of an extension request, and now has priority date of April 21, 2000. All water rights on the Green River with priority dates earlier than April 21, 2000, are therefore senior in time to this right and are entitled to receive a full allocation of water prior to the applicant receiving any water under this right. Utah Code Ann. §73-3-3(8) provides that a change of an approved application does not affect the priority of the original application. Changes in point of diversion have the potential to impair existing rights. The State Engineer routinely addresses this issue by approving change applications with the condition they are subject to existing or prior rights. The condition can be

thought of as regulating change applications (for localized interference issues) by priority based on the date the change application was filed, which for this application is August 27, 2009.

Only water rights that divert water below the points of diversion under this application can be physically impaired. Aside from stockwatering rights directly on the river, there are 16 water rights that divert downstream from this project to the confluence of the Colorado River. The flow demand requirement to serve these rights is 37.2 cfs. There are significant approved but undeveloped water rights for agriculture in the Green River area. All but one of these approved applications are located upstream from the applicant's project and have an earlier priority date than this application. The one approved but undeveloped application located downstream from this project is for 15 acres of irrigation.

Existing water right statutes do not specifically prohibit the type of change in source, points of diversion, place of use, or nature of use contemplated under this change application – nor has the State Engineer adopted any administrative rules barring such changes. The State Engineer's current Colorado River Policy does not restrict the changes proposed under this application but all applications are reviewed on their individual merits. The State Engineer considers all waters tributary to the Colorado River Basin to be hydrologically connected.

More Beneficial Use of Water

Protest remarks cite the volume of water proposed for use in nuclear power production versus the volume of water required in other types of power production methods. Protestants also assert that other established uses such as domestic, agriculture, livestock, and mining may be a more beneficial use of water than nuclear power production, especially in times of extreme drought.

Applicant's Statement

The applicant submitted numerous statements from various policy makers, including the Utah State Legislature,[7] supporting the development and use of nuclear power.

Summary of Investigation

Whether used in a coal fired plant or a nuclear plant, the amount of water available to the applicant for power generation is limited to 53,600 acre-feet in total under both change applications. Power generation in the State of Utah has historically been and continues to be an important segment of the economy.[8] The power-generation industry in Utah supports thousands of jobs and makes possible many other uses of water such as domestic, mining, industrial, and so on. Providing for the energy needs of the state is one of four top priorities of Governor Gary Herbert. In the Governor's 10-year strategic energy plan, it is pointed out that Utah has the nation's only operating uranium mill and job growth in that sector of the economy could be enhanced by construction of a nuclear power plant in the state. While Utah statutes offer a preference in use during a temporary water shortage emergency (with compensation),[9] there is no

[7] Utah State Legislature. 2009. General Session. *SJR 16.*
[8] Utah Governor's Office of Planning and Budget. 2011. *Economic Outlook 2011.* p. 41. http://geology.utah.gov/emp/energydata/pdf/2011erg.pdf
[9] See Utah Code Ann. §73-3-21.1

declared hierarchy of benefit among beneficial water uses specified in the statute. The Utah Supreme Court (Tanner v. Bacon, 136 P.2d 957, 963 (Utah 1943)) said "that domestic use is the most beneficial use for water and that irrigation is the next most beneficial use in the arid western states is self-evident and well recognized regardless of any statute." However, given the changes which have occurred in lifestyle since that time, and particularly our dependence on energy in today's economy, the State Engineer believes the court's statement must be framed around the issue before them at the time rather than construed as a broad policy regarding a beneficial use hierarchy. The State Engineer is unaware the proposed project is competing with any other project for approval such that the approval of this application will interfere with beneficial uses proposed elsewhere.

1(a)(ii) Section Conclusions

Water Right 09-462 will be administered and regulated by the Division of Water Rights in accordance with statute and the Prior Appropriation Doctrine ensuring that senior water rights are not impaired by this application in times of physical shortage of the water supply. There are currently no provisions in statute, rule, or policy that prohibit this type of change application. Power generation is a recognized beneficial use of water in the State of Utah. The State Engineer has reason to believe that this application will not impair existing rights or interfere with a more beneficial use of water.

§73-3-8(1)(a)(iii) Physically and Economically Feasible

Several of the protests revolve around the physical and economic feasibility of the proposed project. The protests are summarized into two general areas of concern as follows:

Permits and Land Ownership

Some of the protests state that the applicant has failed to provide information regarding whether the proposed project will be able to obtain all required State and Federal permits for the project. The application is also protested on the assertion that neither the applicant nor the developer owns the ground upon which the plant is proposed to be built.

Applicant's Statement

BCH submitted information indicating it believes it can qualify to receive an Early Site Permit (ESP) under current NRC licensing rules. BCH stated that it has satisfied NRC information requirements for the pre-application period for process and scheduling, and continues to work towards meeting statutory requirements. BCH believes it has the right and capability to apply for an NRC license, and specifically for an ESP.

In response to questions about site ownership, BCH stated that there is no Federal requirement for site ownership at this stage in applying for and obtaining an ESP. BCH pointed out that, presently, it is considered a pre-application candidate for an ESP. BCH further indicated that a purchase agreement was executed that opened an escrow with Castleland RC&D for approximately 1700 acres, lots 2, 3, 4 and 5 in the Green River Industrial park. When the terms of the escrow are fulfilled and both parties are satisfied, the lots will be conveyed. BCH stated in

its supplemental information that the contract entered into is not an option on the land but rather a purchase contract.

Summary of Investigation
The State Institutional Trust Lands Administration (SITLA) has leased the project site to Emery County. The Development Lease allows Emery County to enter into contracts with third parties desiring to purchase lots in the industrial park (where the project is proposed to be located) and to facilitate the sale of the property by SITLA to the purchaser. Emery County has indicated that it intends to facilitate the sale of this property to BCH as soon as BCH remits full funding of the purchase price of the lots.[10]

Economic Feasibility

The application was protested as economically infeasible. Protestants cited recent cost estimates for power generated by nuclear plants as being non-competitive and the substantial overruns in cost and time being experienced by some nuclear plants currently under construction. The view was also offered that future demand for electrical power might be less than demand currently being experienced.

Applicant's Statement
The applicant submitted information from various sources citing projected power generation needs required in the U.S. over the next several decades. At the hearing, the applicant outlined that the Western Electricity Coordinating Council (WECC) is the Regional Entity responsible for coordinating and promoting bulk electric system reliability in the Western Interconnection. The BCH presentation showed that the official WECC 2009 projections for existing and planned new electric generation resources drop below the North American Electric Reliability Corporation reserve margin standards in 2018. BCH believes the whole region is expected to be deficient in electric generating resources. BCH indicated its projected in-service date for this project is 2020.

BCH states that Utah has a traditional regulated market for electric power. Consumption in Utah is growing at 3.3% per year, which is 50% greater than the national average. Also cited were population projections showing Utah's population increasing by 56% by 2030. BCH stated that the 17 utilities and or joint action agencies that have entered into due diligence and or discussions with the project serve retail electric load within the projected shortfall region of WECC. BCH believes its projected cost of electricity from this project is competitive and capable of economically meeting new electricity demand requirements for electric utilities.

Summary of Investigation
Information from the report *Annual Energy Outlook 2011*, published by the U.S. Energy Information Administration, predicts nuclear power capacity will increase from 101.0 gigawatts in 2009 to 110.5 gigawatts in 2035. This growth includes 3.8 gigawatts of expansion at existing

[10] Personal Communication with Emery County Economic Development Director, Mike McCandless. 2011

plants and 6.3 gigawatts of new capacity. On a cautionary note, the report states that increases in the estimated costs for new nuclear plants make new investment in nuclear power uncertain.[11]

The Energy Policy Act of 2005 offers significant incentives for development of a new generation of nuclear power plants. Incentives include production tax credits, delay insurance and federal loan guarantees for up to 80% of total project costs.[12]

A 2008 Congressional Budget Office (CBO) report noted that various proposals have been considered that would impose charges on energy producers that emit carbon dioxide and that such policies, if enacted, could further encourage the use of nuclear power by increasing the cost of generating electrical power with fossil fuels. This report, however, also cautions that without the 2005 incentives, generating electricity with nuclear technologies would be roughly 30-35% more expensive than conventional coal and gas technologies. The CBO states that investment in nuclear energy would be unlikely in the absence of carbon dioxide charges and the 2005 incentives.[13]

The WECC 2011 Power Supply Assessment continues to show potential shortages in electrical generating capacity in some sub-regions including the Basin and Southern California beginning as early as 2017 dependant upon what additional resources are brought on-line during that period.[14]

1(a)(iii) Section Conclusions

Approval of a water right application does not authorize trespass, encroachment, easements, rights-of-way, or any other access, permits or use of land or facilities not owned by the applicant. It is the responsibility of the applicant to obtain any such authorizations as may be necessary for this project. The applicant has the responsibility to comply with all other statutes, ordinances, rules, orders, regulations and requirements of Federal, State and local governments, and of their departments, agencies and subdivisions, that are applicable.

Emery County, Green River City, and the Utah Legislature have expressed support for a nuclear power plant to be built. The site chosen is near electrical transmission lines and corridors, there is access by surface highway and by railroad, and initial studies indicate the site is seismically stable. Although permits, land acquisition, final design, and cost estimates for the project have

---

[11] U.S. Energy Information Administration. 2011. *Annual Energy Outlook 2011 with Projections to 2035.* http://www.eia.gov/forecasts/aeo/MT_nuclear.cfm#epact.

[12] U.S. Congress. 2005. *Energy Policy Act of 2005.* On the Web at: http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf

[13] Congressional Budget Office. 2008. *Nuclear Power's Role in Generating Electricity, May 2008.* http://cbo.gov/ftpdocs/91xx/doc9133/toc.htm

[14] Western Electricity Coordinating Council. 2011. *2011 Power Supply Assessment. November 17, 2011.* http://www.wecc.biz/committees/StandingCommittees/PCC/LRS/Shared%20Documents/Power%20Supply%20Assesment/2011%20Power%20Supply%20Assessment.pdf

not been completed, the State Engineer believes, based on the description of what has been proposed and the existence of other similar facilities in the United States, the project is physically feasible.

Given that the western United States is growing and there will be a need for additional generating capacity, there is reason to believe that there will be a market for the electricity generated at the plant. With the move to produce energy from sources with fewer carbon emissions, nuclear power may become more competitive with conventional fossil fuel power plants. Changes in energy policy and market conditions are beyond the control of the State Engineer but, based on the information presented, the State Engineer has reason to believe that this change application is for an economically feasible project.

§73-3-8(1)(a)(iv) Financial Ability to Complete the Proposed Works

The application is protested on the grounds that neither the applicant nor its agent has the financial ability to complete the proposed works. Information provided by the protestants estimate the cost to secure an ESP as approximately $100 million and the cost to construct the plant as between $12 and $18 billion.

Applicant's Statement
BCH asserts that it has the ability to finance the project as scheduled under its current step-by-step development program and to date has accrued approximately 3-years of preparation, studies, and strategic business development representing millions of dollars in value and investment.

BCH presented a table at the hearing showing its capital acquisition schedule through 2015 indicating how BCH would acquire the estimated $100 million for the permitting and licensing phase of the project. BCH stated that a term-sheet for $50 million of investment into the project has been signed with a private equity fund and that existing or in-progress negotiations with utilities represent total commitments of $72 million, or approximately 72% of the needed capital for this stage of development. BCH submitted information indicating it has entered into an agreement with LeadDog Capital L.P. for private equity financing to provide up to $30 million in capital in exchange for Blue Castle common stock. BCH states that the financing for the permit will take place over a 3-year period and term-sheets have been signed with 17 different utilities, representing 4500 Mwe of power.

1(a)(iv) Section Conclusions
The statute does not require that an applicant have all of the funds to fully construct a project immediately available before the State Engineer approves a water right application. The applicant is a public agency with taxing authority. The lessee of the water and project developer, BCH, is a private company. The applicant, through the lessee, has demonstrated to the satisfaction of the State Engineer an ability to secure funding as needed, on a step-by-step basis, and a plan to continue to capitalize the project sufficient to establish a reason to believe that the applicant has the financial ability to complete the works.

§73-3-8(1)(a)(v) Filed in Good Faith, Not for Speculation or Monopoly

The application is protested on the speculative nature of the proposed project. Protestants point out that BCH is neither a utility nor a publicly owned company and intends to conduct the site preparation necessary for award of an ESP in order to sell the ESP at a future date to a utility that would build the nuclear plant. Protestants cite past State Engineer decisions rejecting certain speculative applications where the intent of the applicant was to acquire a water right and then sell it. Protestants also state that the application was not filed in good faith since detailed engineering, financial, and environmental analyses did not accompany the filing.

Applicant's Statement
BCH states that its business model does not entail a strategy of transfer or sale of the NRC licenses but calls for additional utility and merchant participation within the current BCH entity structure. They cite Page Electric Utility as having entered into a Memorandum of Understanding for a purchase of equity in the project. All of the project assets are owned by BCH and Page Electric Utility would become an equity owner of BCH. BCH states it has no plans to transfer the water leases and will be the entity that will put to beneficial use the leased water under the applications.

1(a)(v) Section Conclusions
The State Engineer has reviewed this statutory requirement in the context of Utah water appropriation law. Under that law the right to divert and use public water is tied to using the water for a beneficial purpose. The water is made freely available without tax or use fee. The Utah Legislature has acknowledged the use of water is required for economic growth and has in statute recognized beneficial use as a public use (Utah Code Ann. §73-1-5). The application before the State Engineer is a proposal to change an existing approved application to appropriate water for a coal fired power plant to a new location for use in a nuclear power plant. The application, filed with the State Engineer over two years ago, has faced ongoing public scrutiny. The applicant has addressed criticisms and further explained and refined their plans to accomplish the definite project laid out in the application, which is designed to put water to beneficial use for the purpose of producing electrical energy to be sold in existing electrical markets. While the proposal may be ambitious, the State Engineer believes the applicant has a plan to place water to beneficial use, which has been put forward in good faith by the applicant, and there is no reason to believe the applicant intends only to monopolize the water resource or profit from speculation on its eventual use. The State Engineer believes that this application was filed in good faith and not for purposes of speculation or monopoly.

§73-3-8(1)(b)(i) Public Welfare / Recreation / Natural Stream Environment

Public Welfare
Several protests express concern that public health and safety may be jeopardized as a result of this project. Concern was expressed over a perception that agricultural and livestock products grown or raised in the Green River area may be contaminated with radioactive materials and that such a perception by consumers would be detrimental to agricultural interests, the general public

in Green River, and the local economy. Concern was also expressed that the Central Utah Project, which supplies water for municipal purposes to more than 600,000 people on the Wasatch Front, would be curtailed ahead of this application in times of shortage, thereby placing at risk the considerable public investment in the Central Utah Project, and the general welfare of a large segment of Utah's population center.

Applicant's Statement

With respect to the public welfare criterion, BCH states that before it is able to make use of the water rights the NRC must make a comprehensive determination on the impact of the Blue Castle Project on the public welfare. BCH states further that the U.S. Supreme Court has held that NRC licenses "can only be issued consistently with the health and safety of the public. But the responsibility for safeguarding the health and safety belongs under the statute to the Commission." *Power Reactor Development Co. v. International Union,* 367 U.S. 1529, 1533 (1961). BCH also points out that the U.S. Supreme Court has held, on multiple occasions, that the responsibility for protecting the public with respect to radiological health and safety belongs uniquely and only with the NRC.

BCH asserts that NRC's expansive environmental and public health and safety obligations will sufficiently address all of the related issues within the scope of the State statutes regarding consideration of the public welfare. These will include consideration of surface and groundwater consumptive use, physical and environmental aquatic impacts, discharges into surface waters and groundwater, and potential surface and groundwater contamination issues. BCH believes the 70 cfs and 2,000 acre-feet storage reservoir accounts for all NRC requirements for a licensed operating nuclear power plant of this size and scope. BCH stated that the requirement for water storage capacity is 30 days of water for safe shutdown and cooling. In response to the failures experienced at the Fukushima, Japan nuclear power plant, BCH asserts that its project will have additional power supply redundancy, sufficient cooling system capability, and additional emergency preparedness requirements.

Summary of Investigation

The NRC is responsible under the Atomic Energy Act of 1954, as amended (Pub. L. 83-703, 68 Stat. 919), for the development and regulation of nuclear energy and radiological health and safety of the public. In 1959, legislation was enacted to promote an orderly regulatory pattern between the Federal and State governments with respect to regulation of byproduct, source, and special nuclear material, while avoiding dual regulation. That legislation added section 274 (referred to as the Federal-State amendment) to the Atomic Energy Act. Section 274 (42 U.S.C. 2021) authorizes the NRC to enter into an agreement with the Governor of any State providing for the discontinuance of regulatory authority of the NRC with respect to byproduct materials, source materials, and special nuclear materials in quantities not sufficient to form a "critical mass." However, section 274c (42 U.S.C. 2021(c)) provides that the NRC shall retain authority and responsibility with respect to regulation of the construction and operation of production or utilization facilities.

The NRC regulates nuclear power plant operations principally under Title 10, Parts 50, 52 and 55, of the *Code of Federal Regulations*. Utah has entered into agreements with NRC that give Utah the authority to license and inspect byproduct, source, or special nuclear materials used or possessed within Utah. The Radiation Control Act, Utah Code Title 19, Chapter 3, provides the Utah Department of Environmental Quality's Radiation Control Board the authority to make rules to protect the public and environment within the State of Utah from significant sources of radiation, but no authority has been delegated by the NRC, nor may it be lawfully delegated, for the construction and operation of nuclear power plants.

Licenses to operate a nuclear power plant under Federal statute are granted only to those equipped to observe, and who agree to observe, such safety standards to protect health and to minimize danger to life or property as the NRC establishes by rule. The NRC maintains oversight of the construction and operation of a facility throughout its lifetime to assure compliance with the Commission's regulations for the protection of public health and safety, the common defense and security, and the environment. To construct or operate a nuclear power plant, an applicant must submit a Safety Analysis Report. This document contains the design information and criteria for the proposed reactor and comprehensive data on the proposed site. It also discusses various hypothetical accident situations and the safety features of the plant that prevent accidents or, if accidents should occur, lessen their effects.[15]

A July 2011, report issued by the NRC on the Fukushima Dai-Ichi, Japan accident concluded that "*The current regulatory approach, and more importantly, the resultant plant capabilities allow the Task Force to conclude that a sequence of events like the Fukushima accident is unlikely to occur in the United States and some appropriate mitigation measures have been implemented, reducing the likelihood of core damage and radiological releases. Therefore, continued operation and continued licensing activities do not pose an imminent risk to public health and safety.*"[16]

1(b)(i) Sub-Section Conclusions – Public Welfare

It is the opinion of the State Engineer that health and safety issues related to development of a nuclear power plant will be addressed by the NRC. The State Engineer recognizes the NRC as the congressionally designated authority on use of nuclear power and protection of radiological health and safety such that there is reason to believe a nuclear power plant constructed and operated under its licensing regulations will not be detrimental to the public welfare.

The State Engineer must separately authorize alterations to natural streams, including any new diverting works contemplated as part of the proposed project, and the construction of water storage facilities. No definite plans for the facility and its water diversion, conveyance, or storage works have been developed such that the State Engineer can review the plans and design

---

[15] Information obtained from the NRC website: *http://nrc.gov*, 2010.

[16] U.S. Nuclear Regulatory Commission. 2011. *Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident.* p. vii.; On the Web at: http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf

to make an engineering determination as to the adequacy of those works with respect to public welfare. The State Engineer, therefore, retains jurisdiction to participate in the review and approval of such plans as they become available. Since this right is junior in priority to rights held by the Central Utah Project (CUP), in times of shortage, this right would be curtailed before the more senior rights held by the CUP ensuring no interference would occur to CUP from water use associated with this right.

Based on the information reviewed, there is reason to believe that the diversion and use of water under this application will not be detrimental to the public welfare.

Recreation

The protests raise concerns related to impacts on recreation in the Green River area. These largely focused on the possibility of substantially reduced water flow that may affect river rafting outfitters and guides.

Applicant's Statement

BCH presented information at the hearing to show that an additional 70 cfs diversion of water at the proposed points of diversion, including all presently active diversions on the river, would result in extremely small changes in channel depths and velocities of river flow in the Green River area. They presented information that showed less than a few inches of change to water depth, width, velocity or cross-sectional area during average water years. The applicant believes these very small changes will have minimal impact on recreational boating.

1(b)(i) Sub-Section Conclusions – Recreation

Based on the analysis provided by the applicant, it is unlikely that the withdrawal of an additional 75 cfs of flow from the Green River will impact recreational rafting on the Green River.

Natural Stream Environment

Protests related to this criterion assert that diversion of water for this project would impair the overall ecological function of the Green River, degrade downstream water quality and river habitat, and potentially harm sensitive and endangered fish species. The U.S. Fish and Wildlife Service (USFWS) cited various conservation plans, recovery programs, and agreements entered into by State and Federal entities in an effort to conserve and recover sensitive and endangered fish species. USFWS believes that meeting and protecting certain flow recommendations is imperative to recovery of the endangered fish and conservation of other sensitive fish species.

Applicant's Statement

BCH indicated that the NRC conducts the National Environmental Protection Act review process for nuclear reactors in a comprehensive and transparent manner that allows for public comment.

BCH asserts that the information presented at the hearing regarding potential impacts to the natural stream environment includes all of the current cumulative effects of existing diversions from the Green River above its proposed points of diversion, as well as its additional proposed

70 cfs diversion. BCH states that the scientific evidence presented shows an additional 70 cfs diversion produces a minimal impact to the river system resulting in small changes in the water surface elevation of the river at flow rates of 1400 cfs and above which are exceeded 95% of the time. BCH believes that these impacts will not unreasonably affect the natural stream environment nor prevent the goals of recovering endangered fish species from being met.

BCH states that it supports efforts to protect and recover the endangered fish species and has indicated a willingness to work with the USFWS and the Upper Colorado River Endangered Fishes Recovery Program to ensure the diversion of water for the project does not jeopardize the continued recovery of the fish. BCH further states that an Environmental Impact Statement will be required for this project and any anticipated impacts will be addressed through a number of mitigation measures that include critical low flow management strategies. BCH recognizes that it must comply with Section 7 consultations under the Endangered Species Act as it seeks NRC approval for construction of the project. BCH states that the potential impacts to drifting larvae moving downstream past the project can be addressed by designing the intake structure to reduce and prevent larval entrainment. BCH indicates that there would be no thermal pollution or thermal shock as suggested in the protests because the power plant design currently envisioned will not discharge water back to the river.

Summary of Investigation

The NRC, which must license this project, has regulations that implement the National Environmental Protection Act in 10 CFR Part 51. A typical review will include analyses of impacts to air, water, animal life, vegetation, natural resources, and property of historic, archaeological, or architectural significance. The review will evaluate cumulative, economic, social, cultural, and other impacts and environmental justice.

In 1988, the Upper Colorado River Endangered Fishes Recovery Implementation Program – Recovery Action Plan (RIPRAP), a partnership created to recover the endangered Colorado pikeminnow, razorback sucker, humpback chub and bonytail fishes, was implemented as a cooperative effort to recover the endangered fish in the Upper Basin (Green and Colorado Rivers only) while providing for water development to proceed under state water law and applicable federal laws. This agreement provides participants with a "reasonable and prudent alternative" to avoid a jeopardy finding and to avoid the "likely destruction or modification of critical habitat" designated for the endangered fishes.[17] Existing and continued diversions from the Colorado River Basin in Utah are allowed under the program. This program performs research to identify habitat needs for survival of the fishes, sets goals aimed at recovery of the fishes based on known science, and works to implement those goals within the framework of the laws and resources available to the partnership. Utah is a partner in this program. The program has been successful in meeting the Endangered Species Act requirements by providing the elements necessary to serve as the reasonable and prudent alternative for successful Section 7 consultations with the U.S. Fish and Wildlife Service for Federal and local water projects. The success of this program has allowed continued water development in the Upper Colorado River

[17] See Fed. Reg. Critical Habitat Designation, *supra* note 1, at 13,384.

Basin. The goal of the Recovery Program is to achieve naturally self-sustaining populations and protect the habitat and water flows on which they depend such that the fishes can eventually be de-listed. This is accomplished through water leases and contracts, coordinated water releases from upstream reservoirs, efficiency improvements to irrigation systems, and re-operation of Federal dams and reservoirs. Program partners cooperatively manage water resources in accordance with State water law, individual water rights, and interstate compacts.[18]

The U.S. Bureau of Reclamation has been working cooperatively with the USFWS to develop an operation plan for flow releases from Flaming Gorge Dam to accomplish the goals of the Recovery Program. In September 2005, the USFWS released the *Final Biological Opinion on the Operation of Flaming Gorge Dam.* Under the proposed action, Flaming Gorge Dam would be operated to achieve the flow and temperature regimes recommended in Muth et al. (2000), while maintaining all authorized purposes of the Flaming Gorge Unit of the Colorado River Storage Project, particularly those related to the development of water resources in accordance with the Colorado River Compact.

The Bureau of Reclamation's February 2006 Record of Decision for operation of Flaming Gorge states:

> *"The purpose of the proposed action is to operate Flaming Gorge Dam to protect and assist in recovery of the populations and designated critical habitat of the four endangered fishes, while maintaining all authorized purposes of the Flaming Gorge Unit of the Colorado River Storage Project (CRSP), including those related to the development of water resources in accordance with the Colorado River Compact."*
>
> *"This action is limited to the proposition that avoiding jeopardy and making progress toward recovery of listed fish facilitates the ability of the Upper Basin States to continue utilizing and further develop their Colorado River apportionments."*[19]

Five different hydrologic conditions (wet, moderately wet, average, moderately dry, and dry) based on forecasted runoff volume in any given year would provide guidance for setting peak- and base-flow targets to achieve the desired hydrologic variability. An interagency technical working group would be used to implement the flow and temperature recommendations. Flaming Gorge would be operated with the goal of achieving these recommended flows as often as possible while maintaining the other authorized purposes of the Flaming Gorge Dam and Reservoir.

---

[18] Information obtained from the Recovery Program website: http://www.coloradoriverrecovery.org/

[19] Bureau of Reclamation. 2006. *Record of Decision, Operation of Flaming Gorge Dam, Final Environmental Impact Statement.*

The State of Utah recently submitted the *"Utah Work Plan 2010"* to the Recovery Program as an indication of the State's commitment to the Program, diligence to its completion, and sufficient progress with its tasks.

A review of historical flow measurements recorded at the USGS Green River Utah flow monitoring station shows that during drought years flows at this station have typically fallen below the 1300 cfs base flow target recommended by USFWS.

1(b)(i) Sub-Section Conclusions – Natural Stream Environment

The State Engineer is of the opinion that due to downstream responsibilities under the Colorado River Compact there is and will continue to be sufficient flow in the Green River, both natural and released from Flaming Gorge, which will, during most periods, satisfy the flows recommended by the USFWS for endangered fishes. The flow measurements at the USGS Green River Utah station support the State Engineer's opinion but do identify periods when flows drop below the recommended base target flow of 1,300 cfs. Approval of this application has the potential to exacerbate the low flow situation.

The State Engineer supports the RIPRAP. This program has demonstrated that cooperative partnerships can be developed that will meet the goals of endangered fish recovery and allow continued development of water resources within the Colorado River Basin. The State of Utah through RIPRAP participation is attempting to provide uniform mitigation for all Utah water uses up to its Compact allocation. Continued efforts are being made to identify additional flows and storage available on the system that can be used to augment flows from Flaming Gorge to Lake Powell. Water users seeking new developments on the main stem of the Green River may be required to participate in efforts to ensure new diversions from the river do not jeopardize the continued efforts to recover the endangered fish species.

Because this project requires authorization by the NRC, a Section 7 consultation will be required and conducted by USFWS. USFWS will prepare a Biological Opinion, which determines if the actions of the Recovery Program provide the reasonable and prudent alternative for the impacts of this project. If the probable success of the RIPRAP is compromised as a result of this specific project, the Biological Opinion will include additional conservation actions that will need to be completed to avoid jeopardy. USFWS will notify the Recovery Program Implementation and Management Committees when a situation may result in the Recovery Implementation Plan not serving as a reasonable and prudent alternative. The Committee will then decide whether or not the Recovery Program will undertake the additional activities required. If the Recovery Program decides to not implement the additional actions then the project proponent will be required to provide the reasonable and prudent alternatives for the impacts independent of the Recovery Program before the impacts of the project may occur.

The State Engineer believes that continued development of Utah's share of the Colorado River can be achieved along with recovery of the endangered fish species native to the Colorado River system. The State Engineer is of the opinion that the natural stream environment and endangered fish habitat through this stretch of the river will not unreasonably be impacted by this application.

Other Concerns Raised in Protests

Water Contracts from Flaming Gorge Dam

The U.S. Bureau of Reclamation (Reclamation) stated in its protest that stored water is delivered to Lake Powell each year pursuant to the Colorado River Storage Project authorization. Reclamation asserts that any right to use stored water released from Flaming Gorge Reservoir must be based on a water service contract with Reclamation. Reclamation states that it believes without this water service contract, Permanent Change Application 09-462 (a35874) is only entitled to divert Green River accretion below Flaming Gorge Dam and, based on the change application priority date, may face a shortage of water available for diversion from the river.

Applicant's Statement

The applicant pointed out that the flows of the Green River as measured at the Green River station average over 4 million acre-feet per year while releases from Flaming Gorge Dam average only 1.4 million acre-feet per year. The majority of flows at the Green River station come from downstream tributaries to the Green River, not from storage released from Flaming Gorge Dam.

Subsection Conclusion

Once water is released from Flaming Gorge Dam, provided it is not encumbered by other change applications or service contracts, it is regulated as part of the flow of the river on a priority basis.

Summary of the State Engineer's Evaluation and Conclusions

Upon a review of the criteria of the relevant statutes and the information presented by the parties to this application, the State Engineer finds that there is reason to believe that this application complies with the requirements of Utah Code Ann. §73-3-8 and should be approved.

It is, therefore, **ORDERED** and Permanent Change Application Number 09-462 (a35874) is hereby **APPROVED** subject to prior rights and the following conditions:

1) The diversion and depletion of water under this application is limited to 24,000 acre-feet annually. The total rate of diversion may not exceed 75 cfs when combined with Change Application Number 89-74 (a35402).

2) The applicant shall install and maintain measuring and totalizing recording devices to meter all water diverted from the Green River and shall annually report this data to the Division of Water Rights Water Use Program.

3) Sufficient reservoir storage must be maintained to provide for the safe shutdown of plant operations and provide for emergency operations at the plant during periods of curtailment in the event of future compact calls or physical shortages of water.

4) Approval of this application is conditioned on the requirement that the applicant or its agent successfully completes the Section 7 Consultation with the U.S. Fish and Wildlife Service and complies with any conservation measures required.

5) Prior to altering any natural channel or constructing new diversion structures from the Green River, the applicant must file and receive approval of a Stream Alteration Permit with the Division of Water Rights pursuant to the requirements of Utah Code Ann. §73-3-29 and Rule R655-13 of the Utah Administrative Code. Stream Alteration Permits are received and processed by the Dam Safety Section of the Division of Water Rights, which may be contacted at (801) 538-7240. Additional information on permitting requirements for stream alteration activities can be obtained on the Division of Water Rights' website at http://waterrights.utah.gov.

6) Prior to commencing construction of any dam or similar water impounding structure, plans, and specifications for the dam, prepared by a licensed engineer, must be provided to the Dam Safety Section of the Division of Water Rights for review and approval pursuant to the requirements of Utah Code Title 73, Chapter 5a and Rule R655-11 of the Utah Administrative Code. After approval of the plans and specifications by the State Engineer, construction of the dam may commence if all other necessary authorizations are obtained.

7) Approval of this change application does not grant any rights to use property not owned or controlled by the applicant or its agent. Acquisition of all necessary easements, rights of way, or title to property must be made before construction begins. No rights of trespass are created or implied by this approval.

8) The applicant and its agents are required to comply with all applicable local, state, and federal statutes, ordinances, and rules required for construction of this project.

If historical resources such as human remains (skeletons), prehistoric arrowheads/spear points, waste flakes from stone tool production, pottery, ancient fire pits, historical building foundations, remains, artifacts (glass, ceramic, metal, etc.) are found during construction, call the Utah Division of State History at 801-533-3555.

As noted, this approval is granted subject to prior rights. The applicant shall be liable to mitigate or provide compensation for any impairment of or interference with prior rights as such may be stipulated among parties or decreed by a court of competent jurisdiction. This application is also approved according to the conditions of the current appropriation policy guidelines for the Colorado River Drainage, adopted March 7, 1990.

The applicant is advised that other permits are required before any development of this application can begin and it is the responsibility of the applicant to determine the applicability of and acquisition of such permits. Once all other permits have been acquired, this approval is authority to develop the water under this application, which under Utah Code Ann. Sections 73-3-10 and 73-3-12, must be diligently prosecuted to completion. The water must be put to beneficial use and proof must be filed on or before **November 30, 2017, which is the end of the 50-year period under which proof is due on Water Right 09-462 (A37287)**, or a request for extension of time must be acceptably filed and approved; otherwise the application will be lapsed. This approval is limited to the rights to divert and beneficially use water and does not grant any rights of access to, or use of land or facilities not owned by the applicant.

Proof of beneficial use is evidence to the State Engineer that the water has been placed to its fullest intended beneficial use. As required by Utah Code Ann. § 73-3-16, it must be prepared by a registered engineer or land surveyor, who will certify to the location of all diversions, places of use, the extent of uses under this water right, and that other conditions of approval of this application are being complied with.

Failure to comply with the requirements of the applicable statutes may result in the lapsing of this permanent change application.

It is the applicant's responsibility to maintain a current address with this office and to update ownership of their water right. Please notify this office immediately of any change of address or for assistance in updating ownership.

Your contact with this office, should you need it, is with the Southeastern Regional Office. The telephone number is 435-613-3750.

This Order is subject to the provisions of Administrative Rule R655-6-17 of the Division of Water Rights and to Sections 63G-4-302, 63G-4-402, and 73-3-14 of the Utah Code, which provide for filing either a Request for Reconsideration with the State Engineer or de novo review by the appropriate District Court. A Request for Reconsideration must be filed with the State Engineer within 20 days of the date of this Order. However, a Request for Reconsideration is not a prerequisite to seeking judicial review. An action for judicial review must be filed within 30 days after the date of this Order or, if a Request for Reconsideration has been filed, within 30 days after the date the Request for Reconsideration is denied. A Request for Reconsideration is deemed denied when no action is taken 20 days after the Request is filed.

Dated this 23 day of January 2012.

Kent L. Jones, P.E., State Engineer

Mailed a copy of the foregoing Order this 23 day of January, 2012 to:

San Juan County Water Conservancy District
PO Box 246
Blanding, UT 84511

Western Resource Advocates
c/o Bart Miller
2260 Baseline Road, #200
Boulder, CO 80302

United States Department of the Interior
c/o Megan A. Estep
PO Box 25486 Denver Federal Center
Denver, CO 80225-0486

Nancy Dunham
PO Box 540
Green River, UT 84525

Chris Dunham
PO Box 193
Green River, UT 84525

Green River Canal Company
c/o Dean King
PO Box 84
Green River, UT 84525

Curtis and Kerry Rozman
PO Box 416
Green River, UT 84525-0416

Center for Biological Diversity
c/o Rob Mrowka
4261 Lily Glen Ct.
North Las Vegas, NV 89032

Green River Cooperative
c/o Von Bowerman
PO Box 88
Green River, UT 84525

Utah Rivers Council
c/o Ted Wilson
1055 East 2100 South
Salt Lake City, UT 84108

United States Bureau of Reclamation
c/o Provo Office Director
302 East 1860 South
Provo, UT 84606-7317

HEAL Utah
c/o Christopher Thomas
68 South Main Street, Suite 400
Salt Lake City, UT 84101

Uintah Water Conservancy District
c/o N. Gawain Snow
78 West 3325 North
Vernal, UT 84078

Living Rivers and Uranium Watch
c/o John Weisheit
PO Box 466
Moab, UT 84532

Holiday Expeditions, Inc.
c/o Dee Holladay
544 East 3900 South
Salt Lake City, UT 84107

Green River Companies
c/o Nancy Stark
9746 South Roberts Road
Palos Hills, IL 60465-1470

The Sierra Club Utah Chapter
c/o Daniel R. Mayhew
2159 South 700 East, Suite 210
Salt Lake City, UT 84106

Lee Thayn
PO Box 447
Green River, UT 84525

Red Rock Forests
c/o Harold Shepherd
PO Box 2069
Homer, AK 99603-2069

Tim Vetere
PO Box 404
Green River, UT 84525

Grand County Council Members
c/o Robert Greenberg
125 East Center Street
Moab, UT 84532

David Erley
328 Castle Valley Drive
Castle Valley, UT 84532

Joni Pace
PO Box 227
Green River, UT 84525

Pamala R. Hackley
HC 64 Box 3208
Castle Valley, UT 84532

William H. and Geniel Reay
PO Box 257
Green River, UT 84525

Mitchell B. Vetere
PO Box 632
Green River, UT 84525

Jay Vetere
PO Box 175
Green River, UT 84525

Greg Vetere
PO Box 131
Green River, UT 84525

Utah State Capitol
c/o Gary R. Herbert, Governor
350 North State Street, Suite 200
Salt Lake City, UT 84114-2220

Utah Department of Natural Resources
c/o Tammy Kikuchi
1594 West North Temple
Salt Lake City, UT 84114

David K. Marble, P.E.
Assistant State Engineer for Dam Safety
Division of Water Rights

Stream Alteration Section
Division of Water Rights

Water Use Program
Division of Water Rights

BY: _____
Sonia R. Nava, Applications/Records Secretary