

Small-Scale Water Efficiency Projects for FY2022  
Funding Opportunity Number: R22AS00195

# City of Big Bear Lake

## Department of Water & Power



## Pontell Hydropneumatic System Project

**Applicant Information:** City of Big Bear Lake  
Department of Water & Power  
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Big Bear Lake, CA 92315

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# TECHNICAL PROPOSAL

## Section 1. Executive Summary

<b>Date</b>	April 28, 2022
<b>Applicant</b>	City of Big Bear Lake, Department of Water and Power
<b>City, County, State</b>	Big Bear Lake, San Bernardino, California
<b>Type of Applicant</b>	Category A Applicant
<b>Project Name</b>	Pontell Hydropneumatic System Project
<b>Project Length</b>	One Year from Award Date
<b>Estimated Completion Date</b>	March 31, 2024

The City of Big Bear Lake, Department of Water and Power (DWP), located in Southern California, will design, and construct the Pontell Hydropneumatic System Project (Project) which consists of a 1,000-gallon hydropneumatic system, the installation of 100 feet of site piping, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure to prevent the hydropneumatic tank from freezing. The benefit of the Project is to improve the efficiency of the existing booster station, which is currently using energy twenty-four hours a day, seven days a week. The hydropneumatic tank is designed to maintain water pressure without the continuous use of a pump. By regulating system pressures, the hydropneumatic tank will provide an efficient water supply to quickly meet water system demands. Once funding is approved and the DWP is authorized to begin the Project, the DWP estimates that it will take one year to complete the Project. The Project is not located on a Federal Facility.

## Section 2. Project Location

The DWP's service area is, on average, 6,750 feet above sea level at the eastern end of the San Bernardino Mountains in San Bernardino County, California and encompasses approximately 13 square miles primarily south of Big Bear Lake. The DWP serves the City of Big Bear Lake, Sugarloaf, Erwin Lake, Lake William at the east end of the Valley, and Fawnskin north of the Lake.

The Pontell Hydropneumatic System Project will be located on Glenwood Drive next to the existing Pontell booster station. The Project latitude is 34°15'21.75"N and longitude is 116°52'14.96"W.

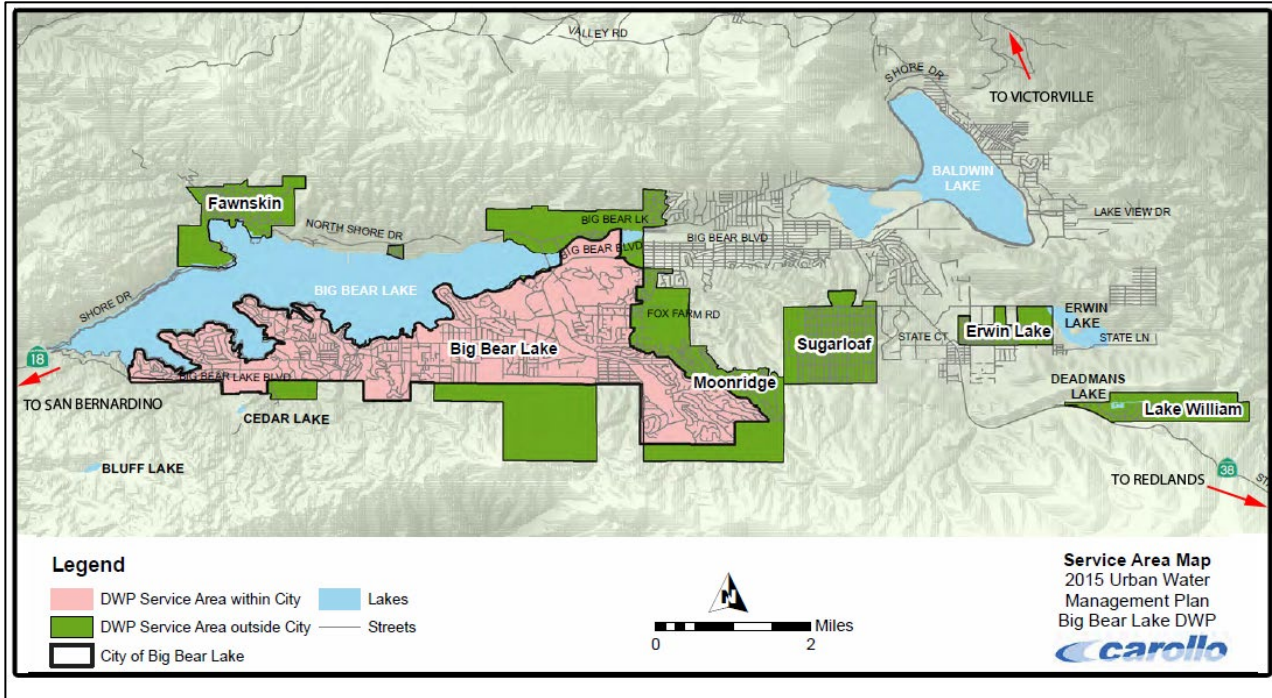


Figure 1 Project Location

### Section 3. Technical Project Description

The DWP hired an engineering consultant, Water Systems Consulting (WSC), to design the Project and hired an environmental consultant, Tom Dodson & Associates, to prepare an environmental and cultural resources compliance assessment for the Project. The Project is in the final design stage and the environmental and cultural resources compliance assessment has been prepared.

#### Section 3.1 Work to be Accomplished

Using the design documents, the DWP will publish notice inviting bids, provide contractors with plans and specifications, and hold a mandatory pre-bid conference for the Project. After sealed bids are publicly opened, the lowest responsible bidder will be recommended to the Board for approval and award of a contract for the Project. Contract documents will be fully executed and required documentation obtained.

During the construction phase, the contractor will purchase a 1,000-gallon hydropneumatic tank per the design and install the tank next to the existing booster station building. The footprint of the new hydropneumatic tank is approximately twenty feet by ten feet. The site is already paved.





Figure 2 Existing Pontell Booster Station

Additionally, the contractor will install 100 feet of site piping to connect the hydropneumatic tank to the booster station. Next, the contractor will install a hydropneumatic control panel. Lastly, the contractor will purchase a prefabricated insulated fiberglass enclosure and install the enclosure around the hydropneumatic tank to prevent the hydropneumatic tank from freezing.

### Section 3.2 Approach to Complete the Work

The DWP will hire a contractor to perform the work required for the Project. DWP's Senior Purchaser/Construction Inspector will provide daily construction observation, take Project photographs to validate performance, and address any issues identified during the construction of the Project.

### Section 3.3 Materials, Equipment, and Work to be Conducted

Materials necessary for the Project include the following: (1) a 1,000-gallon hydropneumatic tank; (2) 100 feet of site piping and fittings; (3) a hydropneumatic control panel; and (4) a prefabricated insulated fiberglass enclosure. Equipment will be furnished by the hired contractor.

## Section 4. Evaluation Criteria

### Section 4.1 - Evaluation Criterion A—Project Benefits (35 points)

**Benefits to the Applicant's Water Delivery System:** Describe the expected benefits to the applicant's water supply delivery system. Address the following:

- Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.

Hydropneumatic tanks are designed to maintain water pressure without the continuous use of a pump. The existing booster pumps at the Pontell site run twenty-four hours a day, seven days a week to provide pressure for intermittent water demand. The hydropneumatic system will provide efficient and consistent water supply that will quickly meet water system demands.

- Explain the significant of the anticipated water management benefits for the Category A applicant's water supply delivery system and customers. Consider:
  - Are customers not currently getting their full water right at certain times of year?

Customers are getting their full water rights, but the current water delivery system is inefficient.

- Does the Project have the potential to prevent lawsuits or water calls?

There are currently no issues with lawsuits and water calls, and we do not expect any after construction of the Project.

- What are the consequences of not making the improvement?

The current water delivery system uses power twenty-four hours a day, seven days a week to meet intermittent water demand and as such, the equipment will inevitably wear out quicker from constant use. With the proposed hydropneumatic system, the booster pumps are estimated to only operate approximately an hour per day, significantly reducing power usage and wear on equipment.

- Are customer water restrictions currently required?

Yes, the DWP has implemented permanent water conservation restrictions including for example: (1) prohibiting the hosing off of sidewalks and driveways; (2) requiring the washing of automobiles to be with a hose equipped with a shut-off nozzle; (3) prohibiting the watering of lawns in a manner that causes runoff or within 48 hours after measurable precipitation; and (4) prohibiting outdoor watering between 9 a.m. and 6 p.m. April 1 through November 1 annually to prevent water loss through evaporation.

- Other significant concerns that support the need for the Project.

Because the current booster station operates twenty-four hours a day, seven days a week to meet intermittent demand, there is a significant equipment wear and excess use of energy to run the equipment.

**Broader Benefits:** Describe the broader benefits that are expected to occur as a result of the Project. Consider:

- Will the Project improve broader water supply reliability at sub-basin or basin scale?

The Project improves the efficient movement and delivery of water, but it does not necessarily improve water supply reliability at the sub-basin or basin scale.

- Will the proposed Project increase collaboration and information sharing among water managers in the region? Please explain.

Water service within the Bear Valley basin is provided by the DWP and the Big Bear City Community Services District (CSD). The DWP and the CSD worked together to prepare, review, and adopt the Bear Valley Basin Groundwater Sustainability Plan. The proposed Project will be shared with the CSD at the next bi-annual Technical Review Team joint meeting.

- Will the proposed Project positively impact/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.

The proposed Project will positively benefit the community's cost of water service. The proposed hydropneumatic project will reduce operational and maintenance costs. Increasing the efficiency of DWP's operations allows us to continue to provide water service at rates significantly below the San Bernardino County average cost of service.

- Will the Project complement work being done in coordination with National Resources Conservation Service (NRCS) in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.

The DWP is currently completing a \$15 million pipeline replacement project that is funded by the USDA. The proposed project will allow the DWP to improve the efficiency of the existing booster station and better serve a disadvantaged community.

- Will the Project help address drought conditions at the sub-basin or basin scale? Please explain.

The Project benefits include water efficiency, energy savings, and enhanced long-term use of water facility equipment. That being said, as the state of California is currently in a state of emergency due to extreme and expanding drought conditions, any measure to improve water efficiency ultimately addresses drought conditions.

## Section 4.2 - Evaluation Criterion B—Planning Efforts Supporting the Project (30 points)

**Plan Development:** Describe how your Project is supported by an existing planning effort. Identify the planning effort and who developed it.

The Project is supported by the 2021 Water Master Plan adopted by the DWP Board on January 26, 2021, which was prioritized as a pumping facility in need of improvement. The 2021 Water Master Plan was developed by F. Anibal Blandon, P.E. from ALDA, Inc. ALDA had also prepared DWP's 2006 Water Master Plan.

In August 2012, the DWP and ALDA, Inc. entered into a Professional Services Agreement to develop DWP's Capital Improvement Plan (CIP). The Scope of Services for the CIP included the following: (1) updates to the hydraulic model since the 2006 Water Master Plan ; (2) calibration of the hydraulic model to determine how closely the model reflects field statis conditions; (3) updates to the water demand and water connections since the 2006 Water Master Plan; (4) evaluation of transmission alternatives to move water supply into the Town Pressure Zone; (5) hydraulic analysis of DWP's water distribution systems; and (6) preparation of a CIP.

In February 2016, initial results from calibration of the 2006 hydraulic model indicated the model needed improvement as some of the field recorded pressures could not be closely matched by the model. At that point, the preparation of the CIP was put on hold and the scope of the services was modified to include the development of a new hydraulic model.

In August 2020, Mr. Blandon presented the proposed Capital Improvement Plan to the Board based on a new hydraulic model that accurately models the DWP's water system. After incorporating the Board and DWP staff comments, the 2021 Water Master Plan was adopted in January 2021.

**Support for the Project:** Describe to what extent the proposed Project is supported by the identified plan. Address the following:

- Is the Project identified specifically in the planning effort?

The Pontell Hydropneumatic System Project is specifically identified as a priority pumping facility improvement.

- Explain whether the proposed Project implements a goal or addresses a need or problem identified in the existing planning effort?

One of the main goals of the 2021 Master Plan is to identify projects that will improve the efficiency of the operation of DWP's water system. The Pontell Hydropneumatic System Project significantly reduces the power demand of the Pontell booster station and provides superior water service to the customers.



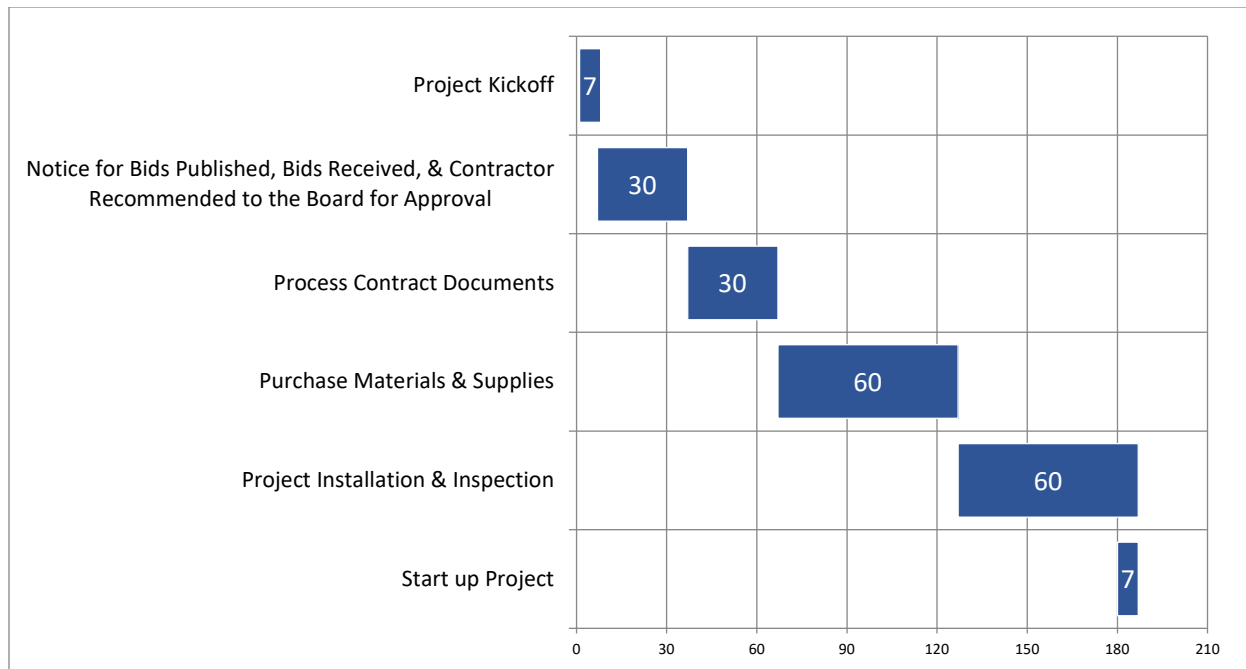
- Explain how the proposed Project has been determined as a priority in the existing planning effort as opposed to other potential Projects/measures.

Based on results of the new hydraulic model, recommended system improvements were grouped into three priorities ranging from the highest priority to the lowest. The proposed Project addresses an existing problem and is prioritized as Priority II to the DWP.

**Section 4.3 - Evaluation Criterion C—Implementation and Results (20 points)**

- Describe the implementation plan for the proposed Project. Please include an estimated Project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

**Table No. 1 Project Schedule**



Upon grant funding approval, the DWP will kick off the project by publishing a Notice Inviting Bids for the Pontell Hydropneumatic System Project and by holding a mandatory pre-bid meeting for interested contractors. When the bids are publicly opened, the contractor with the lowest responsible bid will be recommended to the DWP Board for award of the project contract. The contractor will be responsible for purchasing a 1,000-gallon hydropneumatic tank, 100-feet of site piping and fittings, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure. Once the necessary materials and supplies are obtained, the contractor will be responsible for the installation of the hydropneumatic system. The DWP will have staff daily inspect the contractor’s progress, address any issues identified, take project photographs, and ensure that the project is completed a timely manner.

- Describe any permits that will be required, along with the process for obtaining such permits.

No permits are required for the Project.

- Identify and describe any engineering or design work performed specifically in support of the proposed Project.

The Master Plan Consultant used the Hydraulic Model to prioritize the Project. WSC designed the Project to DWP's requested specifications.

- Describe any new policies or administrative actions to implement the Project.

Administrative actions include preparation and execution of contract documents, review, and timely payment of contractor invoices, and filing of the Notice of Completion for the Project with the County of San Bernardino.

- Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?

Tom Dodson & Associates (Tom Dodson) completed the environmental and cultural resource compliance assessment. Tom Dodson recommends the filing of a Class 3 Categorical Exemption and Notice of Exemption. This will be recorded with the County of San Bernardino once Project funding is finalized. DWP and Tom Dodson have an excellent working relationship with the local Reclamation office.

#### **Section 4.4 - Evaluation Criterion D— Nexus to Reclamation (5 points)**

- Is the proposed Project connected to a Reclamation Project or activity? If so, how?

Through its Title XVI Program, Reclamation is partially funding the Replenish Big Bear Reclaimed Water Reclamation Project. The Project includes percolating blended reclaimed water and surface water into the aquifer in which DWP gets its water supply. DWP is one of the five Bear Valley agencies on the Replenish Big Bear Team.

Please consider the following:

- Does the applicant receive Reclamation Project water?

DWP does not currently receive Reclamation Project water. Once the Replenish Big Bear Project is completed, DWP will receive water from a Project funded by Reclamation.

- Is the Project on Reclamation proper lands or involving Reclamation facilities?

The Project is not on Reclamation proper lands or involving Reclamation facilities. Once the Replenish Big Bear Project is completed, a portion of the DWP water supply will be from a Project funded by Reclamation.

- Is the Project in the same basin as a Reclamation Project or activity?

Once the Replenish Big Bear Project is completed, a portion of the DWP water supply will be from a Project funded by Reclamation.

- Will the proposed work contribute water to a basin where a Reclamation Project is located?

Once the Replenish Big Bear Project is completed, a portion of the DWP water supply will be from a Project funded by Reclamation.

## **Section 4.5 - Evaluation Criterion E— Presidential and Department of the Interior Priorities (10 points)**

### **Combating the Climate Crisis**

- Please provide specific details and examples on how the Project will address the impacts of climate change and help combat climate crisis.

The U.S. Forest Service Designates the Bear Valley as “High” to “Very High” fire threat. The Project will reduce the energy needed to manage water and enhance DWP’s ability to supply water to sustain firefighting operations in the event of a wildfire in the DWP service area.

### **Disadvantaged or Underserved Communities**

- Will the proposed Project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities.

The proposed water efficient Project benefits disadvantaged (DAC) and severely disadvantaged communities (SDAC). Using the California Department of Water Resources DAC mapping tool and the Cooperative Watershed Act (CWA) definition of a DAC community, most of the DWP service area qualifies as a DAC (DWR criteria), 8% qualifies as a SDAC (DWR criteria) and 100% qualifies as a DAC (CWA criteria). The proposed Projects delivers water more efficiently and saves energy, which helps the DWP to provide water service at rates which are significantly below the San Bernardino County average.

- Please describe in detail how the community is disadvantaged based on a combination of variables that may include:
  - Low income, high and/or persistent poverty

The California statewide median household income (MHI) provided by the most recent Census American Community Survey (ACS) 2014-2018 dataset is \$71,228. Using the California Department of Water Resources (DWR's) DAC Mapping Tool a DAC is 80% of the statewide MHI and a SDAC is 60% of the statewide MHI. Therefore, a community where the MHI is less than \$56,982 meets the DAC threshold and less than \$42,737 meets the SDAC threshold. In addition, Section 1015 of the Cooperative Watershed Act (CWA) defines a DAC as a community with an annual MHI that is less than 100% of the statewide annual MHI. Using the criteria noted above, most of the DWP service area qualifies as a DAC (DWR criteria), 8% qualifies as a SDAC (DWR criteria) and 100% qualifies as a DAC (CWA criteria) as shown in the figure below.

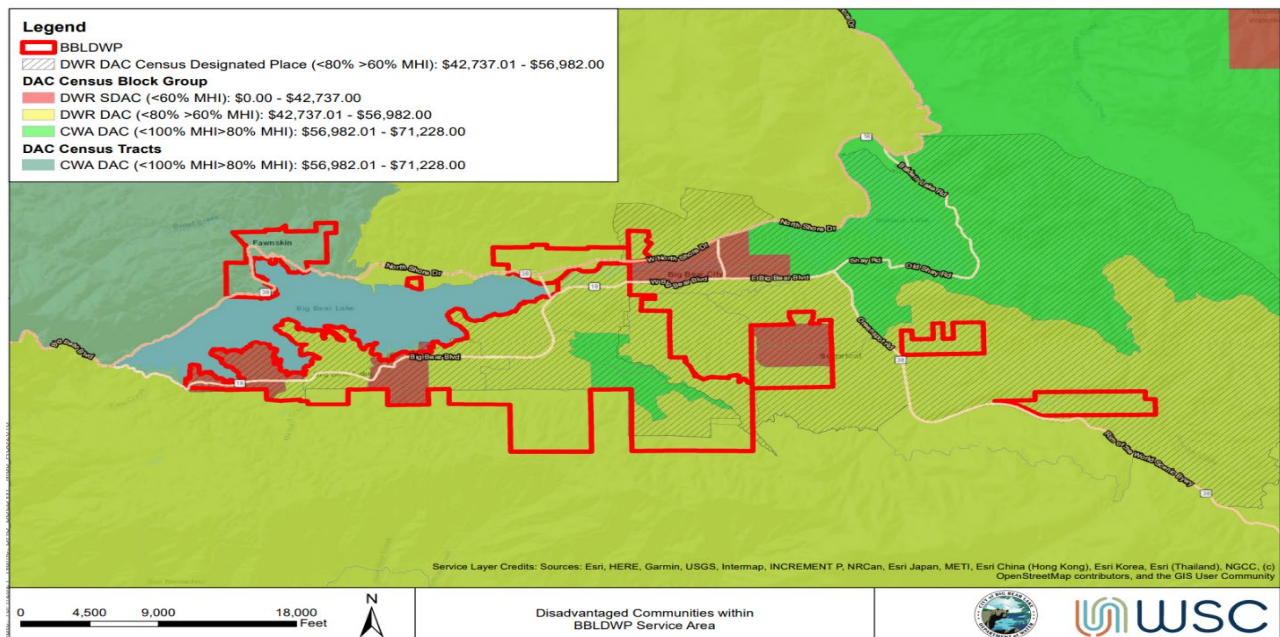


Figure 3 Disadvantaged Communities Map of Bear Valley

- High housing cost burden and substandard housing

According to Realtor.com, in March 2022, the median price of a sold home in the Bear Valley is \$500,000 which is up 17.6% year-over-year. According to the San Bernardino Sun, San Bernardino County's median home price is a new record high at \$500,000. Because the Bear Valley is a resort town, the home prices are driven higher by short-term housing rentals. It is difficult for the Bear Valley workforce to find affordable housing.

- If the proposed Project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic,

as well as, geographic communities, that have been systematically denied the full opportunity to participate in aspects of economic, social, and civic life.

There is no evidence the community meets the underserved definition in E.O. 13985.

## PROJECT BUDGET

### Section 1. Funding Plan and Letters of Commitment

The DWP will fund all costs for the Project above and beyond the amount funded by the federal government with revenue from water rates, and/or capital improvement reserves.

**Table No. 2 Summary of Non-Federal and Federal Funding Sources**

FUNDING SOURCE	FUNDING AMOUNT
<b>Non-Federal entities</b>	
Recipient Capital Improvement Reserves	\$125,000
<b>Non-Federal subtotal:</b>	\$125,000
<b>Other Federal entities</b>	
None	
<b>Other Federal subtotal</b>	
<b>Requested Reclamation Funding:</b>	\$100,000
<b>Total Project Funding</b>	<b>\$225,000</b>

### Section 2. Budget Proposal

A budget proposal is provided in the following tables. Table No. 3 identifies both the DWP contributions, and the U.S. Bureau of Reclamation grant funds required to implement the Project.

**Table No. 3 Budget Proposal**

Budget item description	Computation		Quantity Type (hours/days)	Total Cost
	\$/unit	Quantity		
<b>Salaries and wages</b>				N/A
<b>Fringe Benefits</b>				N/A
<b>Equipment</b>				N/A
<b>Supplies/materials</b>				N/A
<b>Contractual/construction</b>				
Contractor(s) to install the				\$225,000



hydropneumatic tank, site piping, hydropneumatic control panel, and prefabricated enclosure				
			<b>Total</b>	<b>\$225,000</b>
<b>Third-Party In-Kind Contributions</b>				
				N/A
<b>Other</b>				
				N/A
<b>Total Direct Costs</b>				<b>\$225,000</b>
<b>Indirect costs</b>				
				N/A
<b>Total Estimated Project Costs</b>				<b>\$225,000</b>

### Section 3. Budget Narrative

#### *Salaries and Wages*

The DWP is not including salaries or wages in the budget proposal. All DWP salary and wage costs will be paid by the DWP independent of the funding proposal.

#### *Fringe Benefits*

The DWP is not including fringe benefits in the budget proposal.

#### *Travel*

DWP is not requesting reimbursement for travel costs for this Project.

#### *Equipment*

DWP is not requesting any equipment costs.

#### *Materials and Supplies*

Materials necessary for the Project include the following: (1) a 1,000-gallon hydropneumatic tank; (2) 100 feet of site piping; (3) a hydropneumatic control panel; and (4) a prefabricated insulated fiberglass enclosure. The materials and supplies will be furnished by the Contractor.

**Table No. 4 Materials and Supplies**

2019 Small Scale Automation Grant	
Furnished by the Contractor	
<b>Sub-Total</b>	<b>N/A</b>
<b>GRAND TOTAL</b>	<b>N/A</b>

The DWP has received informal construction estimates for this Project.

### *Contractual*

The DWP will hire a contractor to perform the work required for the Project.

### *Third-Party In-Kind Contributions*

DWP will not be accomplishing any of the work for the Project through third-party contributors.

### *Environmental and Regulatory Compliance Costs*

The DWP anticipates that there will be minimal (less than \$1,000) cost to the USBR to conduct any environmental compliance activities.

### *Other Expenses*

No other expenses are anticipated for this Project.

### *Indirect Costs*

No indirect cost reimbursement is being requested for this Project.

### *Total Costs*

The total estimated Project cost is \$225,000. The requested Federal share is \$100,000; the total non-Federal share is \$125,000.

## **ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE**

- Will the proposed Project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)?

The Hydropneumatic System Project will be constructed within an existing DWP paved site. Impacts created during the project will be mitigated with best practices (i.e. dust control).

- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the Project area? If so, would they be affected by any activities associated with the proposed Project?

The DWP is not aware of any Federal threatened or endangered species or designated critical habitat in the Project area. It is not anticipated that any species would be negatively affected by any activities associated with the proposed Project.

- Are there wetlands or other surface waters inside the Project boundaries that potentially fall under Clean Water Act (CWA) jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed Project may have.

There are no wetlands or other surface waters inside the Project boundaries that potentially fall under CWA jurisdiction as "waters of the United States."

- When was the water delivery system constructed?

The majority of DWP's water system was constructed during the 1940's, 50's, and 60's.

- Will the proposed Project result in any modification of or effects to, individual features of an irrigation system (e.g., head gates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

The Project will not result in any modifications or effects to individual features of an irrigation system.

- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?

There are no buildings, structures, or features in the Project area listed or eligible for listing on the National Register of Historic Places.

- Are there any known archeological sites in the proposed Project area?

There are no known archaeological sites in the proposed Project area.

- Will the proposed Project have a disproportionately high and adverse effect on low income or minority populations?

The Project will not have a disproportionately high and adverse effect on low income or minority populations.

- Will the proposed Project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

The Project will not limit access to and ceremonial use of Indian sacred sites or result in other impact on tribal lands.

- Will the proposed Project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

The Project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

## **REQUIRED PERMITS OR APPROVALS**

There are no required permits anticipated for this Project.

## **LETTERS OF SUPPORT**

Letters of Support are attached (Appendix A).

## **OFFICIAL RESOLUTION**

A DWP Board Resolution is attached (Appendix B).

## **UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT**

The DWP is registered with SAM, ASAP and Grants.gov. The DWP unique entity identifier has been provided in the SF-424. SAM registration will be maintained throughout the grant period.



CITY OF  
**BIG BEAR LAKE** *California*

April 11, 2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake, Department of Water and Power – Pontell Hydropneumatic System Project

Dear NOFO Team,

It is my pleasure to write this letter in support of the City of Big Bear Lake, Department of Water and Power (DWP) Pontell Hydropneumatic System Project (Project).

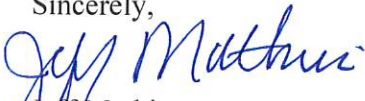
The grant funds will be used to design and construct a 1,000-gallon hydropneumatic system to enhance an existing water booster station. The Project also includes the installation of 100 feet of site piping, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure to prevent the hydropneumatic tank from freezing.

The benefit of the Project is to improve the efficiency of the existing booster station which based on its current design as a closed pressure system is using energy 24 hours a day, 7 days a week. Hydropneumatic tanks are designed to maintain water pressure without the continuous use of a pump. By regulating system pressures, hydropneumatic tanks provide efficient water supply to quickly meet system demands.

The proposed Project benefits a disadvantaged (DAC) and a severely disadvantaged community (SDAC). Using the California Department of Water Resources DAC mapping tool and the Cooperative Watershed Act (CWA) definition of a DAC community, most of the DWP service area qualifies as a DAC (DWR criteria), 8% qualifies as a SDAC (DWR criteria) and 100% qualifies as a DAC (CWA criteria).

I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,

  
Jeff Mathieu  
Interim City Manager





## County of San Bernardino

April 12, 2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

Re: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake,  
Department of Water and Power – Pontell Hydropneumatic System Project

Dear NOFO Team,

As the Third District Supervisor for the County of San Bernardino, I write this letter in support of the City of Big Bear Lake's Department of Water and Power's (DWP) funding request for the Pontell Hydropneumatic System Project.

The project design and construct a 1,000-gallon hydropneumatic system to enhance an existing water booster station in DWP's service area. Additionally, the project will include the installation of 100-feet of site piping, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure to prevent the new tank from freezing. Funding would ensure project delivery and the overall efficiency of energy and water supply in the area.

The City's existing booster station is a closed pressure system which requires the continued use of energy 24/7. Hydropneumatic tanks are designed to maintain and regulate water pressure without the continuous use of a pump, which would assist in the conservation of energy. The implementation of an innovative hydropneumatics tank would provide efficient water supply that can meet system demand.

The communities served by DWP are qualified as disadvantaged and severely disadvantaged communities under the State of California's Department of Water Resources metrics. As the State and specifically the City of Big Bear Lake, continues to suffer from historic drought levels, it is vital that efforts to preserve water supply be supported.

I strongly urge you to consider the City of Big Bear Lake's, Department of Water and Power's funding request. The Pontell Hydropneumatic System Project would have a great impact on the underserved communities serviced by DWP while enhancing water and energy retention in the area. If you have any questions, please do not hesitate to contact me at (909) 387-4855.

Sincerely,

Dawn Rowe  
Third District Supervisor  
San Bernardino County

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# California State Senate

SENATOR  
**ROSILICIE OCHOA BOGH**  
TWENTY-THIRD SENATE DISTRICT



COMMITTEES  
BANKING & FINANCIAL INSTITUTIONS  
VICE CHAIR  
BUDGET  
BUSINESS, PROFESSIONS  
& ECONOMIC DEVELOPMENT  
EDUCATION  
VICE CHAIR  
HOUSING  
LABOR, PUBLIC EMPLOYMENT  
& RETIREMENT  
VICE CHAIR  
PUBLIC SAFETY  
VICE CHAIR

April 14, 2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, Colorado 80225

**RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake, Department of Water and Power – Pontell Hydropneumatic System Project**

Dear NOFO Team:

I write this letter in strong support of the City of Big Bear Lake, Department of Water and Power (DWP) Pontell Hydropneumatic System Project (Project).

The grant funds will be used to design and construct a 1,000-gallon hydropneumatic system to enhance an existing water booster station. The Project also includes the installation of 100 feet of site piping, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure to prevent the hydropneumatic tank from freezing. The benefit of the Project is to improve the efficiency of the existing booster station, which based on its current design as a closed pressure system is using energy 24 hours a day, 7 days a week. Hydropneumatic tanks are designed to maintain water pressure without the continuous use of a pump. By regulating system pressures, hydropneumatic tanks provide efficient water supply to quickly meet system demands. The proposed Project benefits a disadvantaged (DAC) and a severely disadvantaged community (SDAC). Using the California Department of Water Resources DAC mapping tool and the Cooperative Watershed Act (CWA) definition of a DAC community, most of the DWP service area qualifies as a DAC (DWR criteria), 8% qualifies as a SDAC (DWR criteria) and 100% qualifies as a DAC (CWA criteria).

I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project. If you have any questions or concerns, please do not hesitate to contact my Capitol Office at (916) 651-4023.

Sincerely,

A handwritten signature in black ink, appearing to read "ROBOGH".

ROSILICIE OCHOA BOGH  
Senator, 23<sup>rd</sup> District



## BIG BEAR FIRE DEPARTMENT

*Jeff Willis, Fire Chief*

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Administration – P. O. Box 2830, 41090 Big Bear Boulevard  
Big Bear Lake, CA 92315-2830  
Business 909/866-7566 • Fax 909/866-8288

04/25/2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake, Department of Water and Power – Pontell Hydropneumatic System Project

Dear NOFO Team,

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I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,

Jeff Willis  
Fire Chief

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

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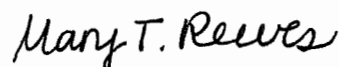
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I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,



Mary T. Reeves, General Manager  
Big Bear City Community Services District





# Big Bear Municipal Water District

## Lake Management

### Board of Directors

Bob Ludecke – Division 1  
Bob Reh fuss – Division 2  
Charlie Brewster – Division 3  
John Eminger – Division 4  
Tom Bradford – Division 5

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

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I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,

Mike Stephenson, General Manager





**BIG BEAR AREA  
REGIONAL WASTEWATER AGENCY**

P.O. Box 517, 121 Palomino Drive, Big Bear City, CA 92314-0517  
(909) 584-4018 • FAX (909) 585-4340

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April 25, 2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake,  
Department of Water and Power – Pontell Hydropneumatic System Project

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I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,

David Lawrence, P.E.  
General Manager  
dlawrence@bbarwa.org



April 20, 2022

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake,  
Department of Water and Power – Pontell Hydropneumatic System Project

Dear NOFO Team,

On behalf of the Big Bear Chamber of Commerce, it is my pleasure to write this letter in support of the City of Big Bear Lake, Department of Water and Power (DWP) Pontell Hydropneumatic System Project (Project).

The grant funds will be used to design and construct a 1,000-gallon hydropneumatic system to enhance an existing water booster station. The Project also includes the installation of 100 feet of site piping, a hydropneumatic control panel, and a prefabricated insulated fiberglass enclosure to prevent the hydropneumatic tank from freezing.

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The Chamber fully supports the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,

Ellen Clarke  
Executive Director  
Big Bear Chamber of Commerce



**Big Bear Moose Lodge #2085  
39247 North Shore Drive  
P.O. Box 308  
Fawnskin, California 92333  
562-455-0269**

Bureau of Reclamation  
Financial Assistance Operations  
Attn: NOFO Team  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

**RE: WaterSMART, Small-Scale Water Efficiency Projects for Fiscal Year 2022 City of Big Bear Lake, Department of Water and Power – Pontell Hydropneumatic System Project**

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I fully support the efforts of the DWP in seeking Bureau of Reclamation funding for the Pontell Hydropneumatic System Project.

Sincerely,



**Dave Emig**  
**Administrator**  
**Big Bear Moose Lodge #2085**

**RESOLUTION NO. DWP 2022-05**

**A RESOLUTION OF THE BOARD OF WATER AND POWER COMMISSIONERS OF  
THE CITY OF BIG BEAR LAKE, DEPARTMENT OF WATER AND POWER,  
COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA,  
REGARDING PARTICIPATION IN FUNDING FOR THE BUREAU OF  
RECLAMATION SMALL-SCALE WATER EFFICIENCY PROJECTS FOR  
FISCAL YEAR 2022 GRANT PROGRAM  
FUNDING OPPORTUNITY NOTICE NO. R22AS00195**

WHEREAS, the City of Big Bear Lake was incorporated on November 28, 1980, and

WHEREAS, the electors of the City of Big Bear Lake did in 1985 adopt an Amendment to the City of Big Bear Lake Charter which created a Department of Water and Power; and

WHEREAS, the United States Department of Interior, Bureau of Reclamation, under its Small-Scale Water Efficiency Projects for Fiscal Year 2022 Grant Program, has made available to qualifying applicants grant funding on a matching fund basis, funds for Small-Scale Water Efficiency Projects; and

WHEREAS, the City of Big Bear Lake, Department of Water and Power has identified projects that exemplify the objectives of the Small-Scale Water Efficiency Projects for Fiscal Year 2022 Grant Program;

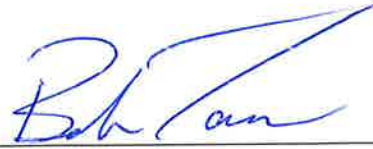
NOW, THEREFORE, BE IT RESOLVED that the Board of Water and Power Commissioners of the City of Big Bear Lake, Department of Water and Power does hereby adopt Resolution No. DWP 2022-XXX confirming the following:

1. The Board of Water and Power Commissioners of the City of Big Bear Lake, Department of Water and Power verify that the General Manager, Reginald A. Lamson has legal authority to enter into an agreement with Bureau of Reclamation.
2. The Board of Water and Power Commissioners of the City of Big Bear Lake, Department of Water and Power support the grant application.
3. The City of Big Bear Lake, Department of Water and Power is capable of providing the amount of funding and/or in-kind contributions specified in the funding plan.
4. That if selected for a Small-Scale Water Efficiency Projects Grant under the Bureau of Reclamation's Fiscal Year 2022 program, the City of Big Bear Lake, Department of Water and Power will negotiate and execute a Cooperative Agreement with the Bureau of Reclamation on/or prior to the established deadline, to fund a minimum of 50% of the projects costs and will provide documentation showing the 50% matching funds are not funded by a Federal Agency.



PASSED, APPROVED, and ADOPTED this 26<sup>th</sup> day of April 2022.

AYES: Hjorth, Smith, Tarras, Wilkey  
NOES:  
ABSTAIN:  
ABSENT:



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Bob Tarras, Chair  
DWP Board of Commissioners

ATTEST:



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Leanne Eagleson, Board Secretary  
DWP Board of Commissioners