



Deutsch Domestic Water Company

Grant Proposal

for

DDWC Storage and Efficiency Improvements

June 15, 2022

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1 Technical Proposal and Evaluation Criteria

1.1 Executive Summary

15 June 2022

Deutsch Domestic Water Co Inc (DDWC)

Crawford, Delta County, Colorado.

DDWC is a category “A” applicant: Water Distribution Authority

The Crawford, Colorado area has experienced unusually several droughts over the past twenty years. With exceptional severity in years 2003, 2012, and 2018. These details are explained in depth in DDWC’s drought management plan. The purpose of the proposed project is to alleviate these conditions by increasing DDWC’s water supply reliability and resiliency through investment to expand existing infrastructure and build upon a comprehensive drought management plan and synergies identified with other local water supply organizations, to include:

- System improvements that will increase flexibility of water deliveries, maximize use of existing water rights consisting of new conveyance system components to increase flexibility to deliver water from different sources.
- Expanding existing raw and treated water storage to enable the capture and better utilization of existing water supplies that can be made available from installing additional storage tanks.
- Development of an alternative and supplemental water source including water treatment facility.

The proposed project will add about 240,000 gallons of strategically placed storage to maximize the use of existing decreed water rights by making use of off-peak spillage to help meet on-peak demand, improve operational efficiencies, mitigate drought impacts, and help meet population growth. It also includes the upgrading of existing storage (about 60,000 gallons), diversion and distribution systems, and automation improvements to maximize effectiveness and document project results. If the grant is approved and funded, DDWC anticipates starting around 1 Apr 2023 and starting construction in April 2024. It anticipates all execution lasting two years, likely ending in the September 2025 construction season. It is also applying for a concurrent grant from the Colorado Water Conservation Board. The proposed project will not be located on a federal facility.

1.2 Project Location

The Deutsch Domestic Water Company (DDWC) is a Special Purpose Water Carrier Company serving the rural area southeast of the Town of Crawford, in Delta and Montrose Counties, Colorado. The Town of Crawford had approximately 403 people during the 2020 census and is located about 72 miles southeast of Grand Junction. Figure 1, below, shows its distribution lines current plan view. The proposed project will construct additional storage tanks along these lines. A feasibility study, conducted as part of the proposed project, will be used to determine locations on the lines where they would provide the best functionality. General project coordinates are 38.425000°N, 107.350244°W.

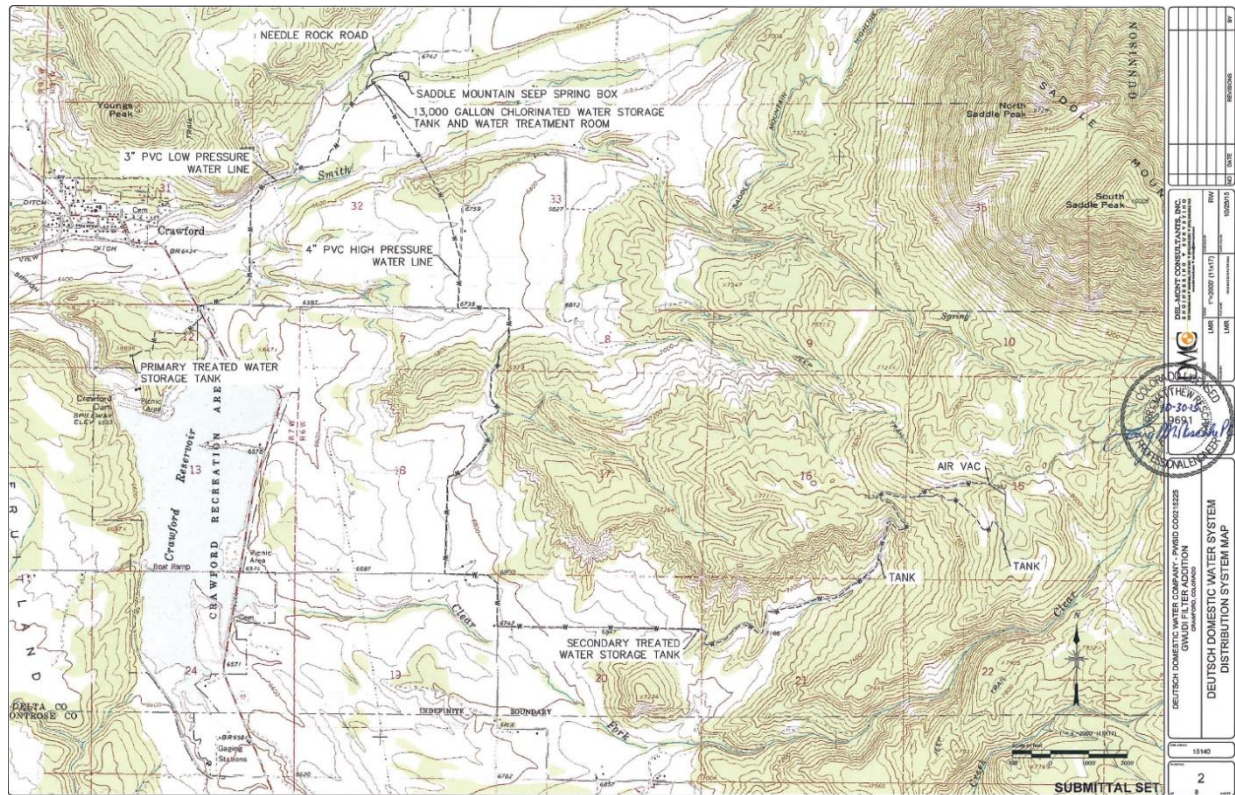


Figure 1: The DDWC system distribution map, dated 28 October 2015.

1.3 Technical Project Description

DDWC proposes a multi-beneficial project stemming from collaboration with a multitude of stakeholders to identify strategies for better managing local water supplies. The proposed project includes an engineering feasibility study with detailed design plans for constructing approximately 240,000 gallons of strategically placed storage to maximize the use of existing decreed water rights by making use of off-peak spillage (about 30 AFY) to help meet on-peak demand, improve operational efficiencies, mitigate drought impacts, and help meet population growth. It also includes upgrades to existing storage (about 60,000 gallons), diversion and distribution systems, and automation improvements to maximize the effectiveness and document project results.

The feasibility study and detailed engineering design will include creating accurate “as built” drawings of the existing system to determine where and how much additional storage is needed to meet the project goals. The feasibility study and detailed design will identify precise locations with volumes for the placement of additional as well as upgrading existing storage on existing private easements. The design work will include upgrades to existing easements and access roads, foundation requirements, mechanical and piping requirements, distribution system upgrades, and instrumentation and automation requirements.

The construction phase is envisioned to include the placement of approximately 240,000 gallons of additional storage, in the form of approved U.S. manufactured vertical drinking water tanks, and the upgrading of about 60,000 gallons of existing storage along with the aforementioned upgrades to achieve the project goals. Table 1, below, lists the specific areas and volumes for

which added storage is planned. A conceptual plan has been created as a starting point for the feasibility and design work.

Table 1: This proposed project will construct 100,000 gallons of additional raw water storage and 140,000 gallons of additional treated water storage, for a total 240,000 gallons added

DDWC Proposed Water Storage for Drought Resiliency Purposes				
No	Description	Existing	Additional	Totals
		(gallons)	(gallons)	(gallons)
1.00	Raw Water Storage			
1.01	Pump House-1	10,000	20,000	30,000
1.02	Young Ditch	-	80,000	80,000
	Subtotals	10,000	100,000	110,000
2.00	Treated Water Storage			
2.01	Pump House-2	10,000	60,000	70,000
2.02	Subdivision	40,000	40,000	80,000
2.03	Lower Long Gulch	-	20,000	20,000
2.04	Upper Long Gulch	-	20,000	20,000
	Subtotals	50,000	140,000	190,000
	Totals	60,000	240,000	300,000
1.00	Raw Water Storage			
1.01	Adding 1 x 20,000 gallon tank to existing 10,000 gallon at PH-1.			
1.02	Installing 4 x 20,000 gallon tanks near Young Ditch.			
2.00	Treated Water Storage			
2.01	Adding 3 x 20,000 gallon tanks to existing 10,000 gallon at PH-2.			
2.02	Installing 4 x 20,000 gallon tanks in subdivision and moving existing 4 x 10,000 gallon tanks to Long Gulch			
2.03	Rehabbing & installing 2 x 10,000 gallons Lower Long Gulch			
2.04	Rehabbing & installing 2 x 10,000 gallons Upper Long Gulch			

1.4 Performance Measures

The proposed method of quantifying the benefits of our project is to install instrumentation to collect and track water supply, tank levels, pressures, system flows, and tap holder demand on a real-time basis and create graphic representations for accurately reporting performance measures. We envision upgrading the control systems at each of our pump stations and storage tanks with small PLCs connected to the local fiber network to provide real-time monitoring of our entire system to all of our managers and maintenance personnel.

Table 2: Quantitative performance measures.

0.75	New Storage Created (acre-feet)
120	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or non-consumptive
0.20	Existing Storage Preserved or Enhanced (acre-feet)
130	Efficiency Savings (acre-feet/year)

1.5 Evaluation Criteria

1.5.1 Project Benefits

- *How will the project build long-term resilience to drought? How many years will the project continue to provide benefits?*

The project will build long-term resilience to drought by designing and constructing strategically placed storage to collect lost off-peak spillage to meet on-peak demand. It will also take advantage of other, currently unused, senior water rights as a supplemental supply source. This is expected to dramatically improve supply and operational efficiencies. Thus, the system will be prepared to respond to existing and foreseeable drought conditions and long-term population growth. The project will continue to provide benefits for more than 30-years.

This is a relatively small “shovel-ready” project that requires minimal feasibility and design work to quickly add significant new storage capacity to maximize the use of existing decreed water rights, dramatically improve operational efficiencies, provide drought mitigation, and conserve water supply resources in accordance with objectives of the Colorado Water Plan, Gunnison Basin Implementation Plan, and USBR’s Crawford Water Conservancy District and associated Smith Fork Project. Figure 2, below, illustrates the importance of this project. It shows how demand exceeds supplies during on-peak times, and how supply is lost during off-peak times.

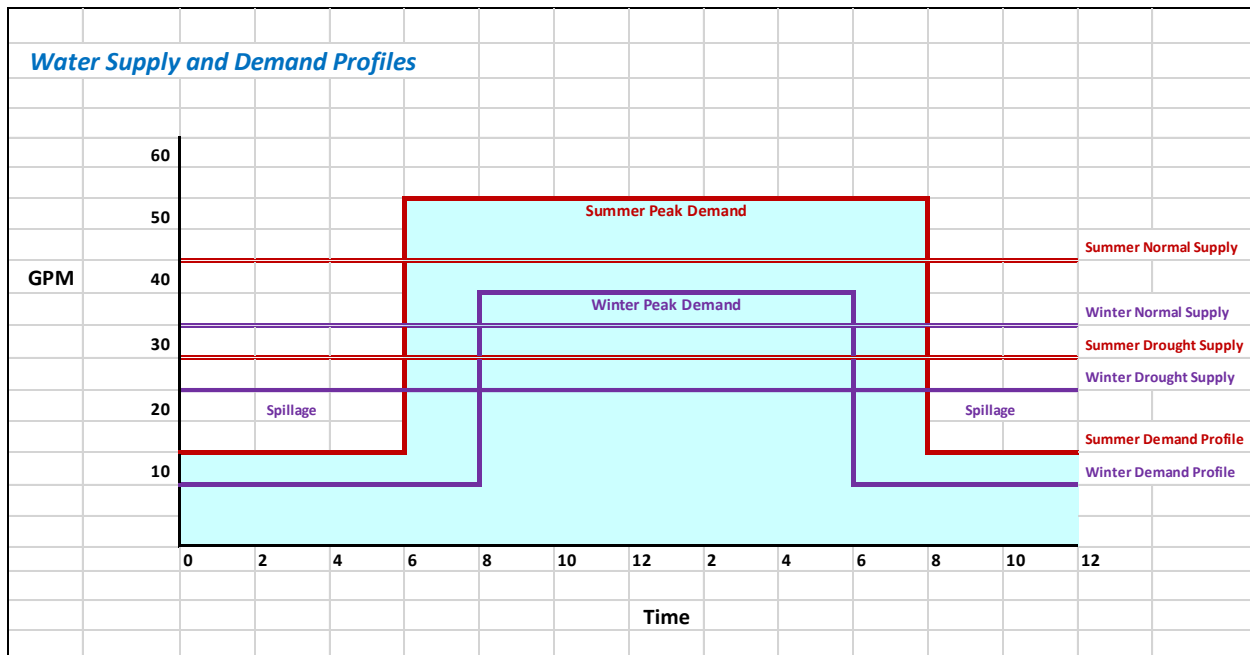


Figure 2: Chart illustrating the average normal and drought supply flow profiles in DDWC water source superimposed on its average seasonal demand curves. Unrecognized off-season overflows exist in the spaces labeled “spillage”. The proposed project aims to recover those, as well as daily off-peak flows (not shown) to meet peak demands.

- Will the project make additional water supplies available?

This project is projected to make additional water supplies available to meet tap holder demands for more than 30-years by making full use of existing decreed water rights.

- If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years.

The project is estimated to make an additional 30 AFY of existing groundwater supply available to meet tap holder demand that has been calculated from monitoring records over the last 10-15 years, augmentation planning, historical data, and recent drought management plan. The project is also estimated to make an additional 92 AFY of existing surface irrigation water supply available to meet augmentation needs and tap holder demand from, senior water rights purchased for said purpose.

- What percentage of the total water supply does the additional water supply represent? How was this estimate calculated? Provide a qualitative description of the degree/significance of the benefits associated with the additional water supplies.

The ability to make use of lost off-peak spillage and surface irrigation rights as additional water supplies, would create significant benefits, such as:

- Increasing use of existing decreed groundwater rights from about 50% to nearly 100%.

- Making use of existing decreed surface irrigation rights for augmentation requirements as well as tap holder demand.
 - Improving operational efficiencies by using lost off-peak spillage to fill strategically placed storage ready to serve tap holders during on-peak demand periods and mitigate drought impacts.
 - Ability to meet anticipated population growth for next 30-years or more.
- Will the project improve the management of water supplies? If so how will the project increase efficiency or operational flexibility?*

The project will significantly improve the management of existing water supplies by using lost off-peak spillage of about 50% to fill strategically placed storage and use surface irrigation rights, to meet on-peak demands, provide operational flexibility, deliver water during drought periods, and meet population growth demands.

The ability to make beneficial use of our lost off-peak spillage, and surface irrigation rights, to meet on-peak demands, will increase water use from about 50% to nearly 100% of available supply. It will also increase operational flexibility in meeting tap holder demands at all times, including drought, by having water readily available in strategically placed storage for drinking and fire protection needs.

o What is the estimated quantity of water that will be better managed as a result of this project? How was this estimate calculated?

The quantity of water that will be better managed as a result of this project is about 157 AFY that is calculated from our decreed groundwater rights of about 65 AFY from the Saddle Mountain Seep and our decreed surface water rights of about 92 AFY from the Young Ditch both of which are derived from the Smith Fork of the Gunnison River managed by the USBR's Crawford Water Conservancy District and associated Smith Fork Project.

o What percentage of the total water supply does the water better managed represent? How was this estimate calculated?

Approximately 75% of the total water supply will be better managed as calculated from about 50% being from our decreed groundwater rights and nearly 100% from our decreed surface water rights. Currently, under normal water supply conditions, we only have enough water available when needed to meet existing tap holder demand. During drought conditions, we do not have enough water in storage to meet summertime demands and are forced to limit nonessential and outside uses. About 50% of our groundwater resource (about 0.093 cfs from Saddle Mountain Seep) is used to meet tap holder demand with the other 50% being lost to off-peak overflow spillage and inability to make full use of existing decreed surface water rights (0.25 cfs from Young Ditch).

With this project, we intend to shift and use as much of our off-peak spillage as possible to fill strategically placed storage to help meet on-peak demands to maximize the use of existing decreed groundwater rights that results in the conservation of as much as 30 AFY of limited groundwater supply and make full use of our existing decreed surface water rights of about 92

AFY to meet augmentation needs, summer demands, and help other project users meet local demands.

o Provide a qualitative description of the degree/significance of anticipated water management benefits.

The significance of our anticipated water management benefits include:

- Being able to make beneficial use of about 30 AFY or about 50% of our decreed groundwater rights to meet the long-term needs of tap holders.
- Being able to make beneficial use of nearly 92 AFY or nearly 100% of our decreed surface water rights to meet the long-term needs of tap holders and/or other project users.
- Ability to meet the higher summer demands while maintaining significant amounts of water in strategically placed storage in meet drinking water and fire protection needs.
- Operational flexibility from ability to meet tap holder demands, from strategically placed storage, when conducting routine maintenance and during emergency situations.

o Will the project make new information available to water managers? If so, what is that information and how will it improve water management?

The project will add instrumentation and automated data collection to provide new real-time information to water managers that will allow for quicker and more precise monitoring, reporting, and troubleshooting of system problems and corrective actions needed.

1.5.2 Drought Planning and Preparedness

DDWC has a published drought management plan which may be accessed at its website, [here](#). It was developed under authority of a grant from the Colorado Water Conservancy Board. This proposed project is a product of conclusions from that plan. Its findings suggested that DDWC could significantly improve its drought management capacities by making better use of off-peak and off-season overflows, by simply adding more storage. Quoted the drought management plan as follows:

“4.1.5 Installing strategically placed storage. DDWC is planning to apply for a CWCB Water Plan Grant for conducting a facility study, with engineering design, for the placement of about 120,000 gallons or more of strategically placed storage to improve operational efficiencies, help mitigate drought impacts, and help meet anticipated load growth. The GBRT concurs and has agreed to provide DDWC a letter of support for inclusion with its Storage Project grant application.”

- *Provide a link to the applicable drought plan.*

https://www.deutschwater.com/files/ugd/f3a344_3c8800ea7dbd46b2b9f5365ef9d87947.pdf

- *Explain how the applicable plan addresses drought. Does the plan contain focused elements including a system for drought monitoring, vulnerability assessments, prioritized mitigation actions, and response actions that correlate to different stages of drought?*

The plan's specific purpose is for monitoring local drought conditions and implementing tiered response criteria for both supply and demand sides.

o Explain whether the drought plan was developed with input from multiple stakeholders. Was the drought plan developed through a collaborative process?

The drought plan was presented in public forum for questions and comments on 18 May 2022. The entire report was then posted on the company website and a thirty-day review period for additional comments opened. It is presently still open for comments.

o Does the drought plan include consideration of climate change impacts to water resources or drought?

DDWC's water supply resources are affected by available recharge water from the Smith Fork that collects runoff from the West Elk Mountains which have demonstrated shortages in the same years as shortages in local surface waters (see Figure 3, below). This suggests short retention times in the seep, and significant influence from climate factors. The published drought classifications used by this drought management plan are based on historic, local statistics. An outlook that includes climate change assumes higher drought frequency and duration for years to come.

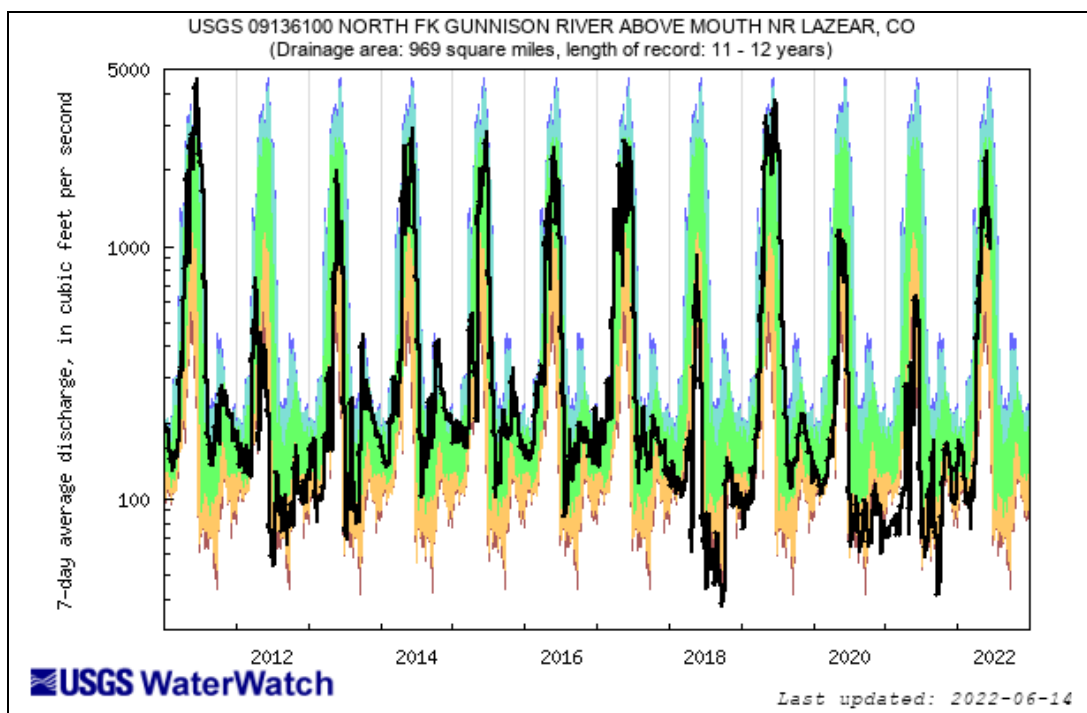


Figure 3: Streamflow seven-day averages measurements at gauge #09136100 "North Fork Gunnison River. It is on an adjacent tributary to Smith Fork where the DDWC Spring Box is located.

o Does the drought plan identify the proposed project as a potential mitigation or response action?

The Drought Management Plan identified the proposed storage and efficiency improvements were identified as the most promising, long-term measures which could be implemented on the supply-side to mitigate drought impacts. (Reference ¶4.1.5 and ¶4.1.7 on the plan.)

o Does the proposed project implement a goal or need identified in the drought plan?

The need for this project has been identified in the recently completed drought management plan.

o How is the proposed project prioritized in the drought plan?

The project's primary objective of increasing supply is expected to be, singularly, the most effective drought countermeasure that could be implemented on the supply side. Secondary objectives for this project include improved monitoring by the installation of additional instrumentation with real-time electronic water flow and quality measurements are also expected to increase water management efficiency.

1.5.3 Sustainability and Supplemental Benefits

• *E.O. 14008 and E.O. 13985.*

U.S. Census.gov published statistics for the Town of Crawford, Colorado, demonstrate that it is a low-income community compared to the rest of the United States. It has recently experience significant job losses associated with closure of coal mining and energy product industry in the area. The town had a total population of 403 in the 2020 census. That census reported it had a median household income of \$47,827, 16.6% of the population had a Bachelor's degree or higher, and 66.3% employment rate.¹ National statistics, by comparison, have a median household income of \$64,994 and 32.9% with a Bachelor's Degree or higher.² The proposed project presents potential economic benefits to this small community and potential for more efficient use DDWC's groundwater resource.

Additionally, DDWC believes improvements to water system efficiency may be supportive of E.O. 14008's section 216, "Conserving Our Nation's Lands and Waters." The improvements are likewise expected to benefit local agricultural and as USBR project users, because of the proximity of its source waters to other supplies. Sustainability and supplemental benefits expected to be realized from this project include maximizing the use of existing decreed water rights to meet the long-term needs of tap holders, including population growth, and ability to mitigate drought impacts without having to acquire additional water rights.

1.5.4 Severity of Actual or Potential Drought Impacts to be Addressed

Describe the severity of the impacts that will be addressed by the project:

DDWC's drought management plan presented time series imagery from the U.S. Drought Monitor. It shows drought severities in the Gunnison watershed since year 2000 in percent area

¹ <https://www.census.gov/search-results.html?searchType=web&cssp=SERP&q=Crawford%20town,%20Colorado>

² <https://www.census.gov/search-results.html?q=2020+median+income&page=1&stateGeo=none&searchtype=web&cssp=SERP& charset =UTF-8>

per unit time. Figure 4, below, illustrates. Years 2002, 2018, and 2021 experienced exceptional droughts, extreme drought was also experienced in 2012.

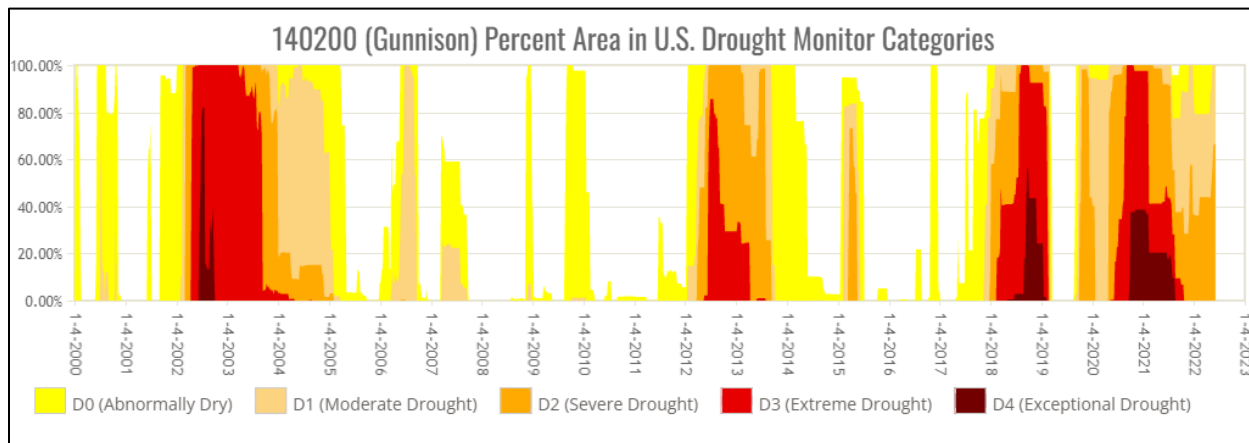


Figure 4: Time series graphic of drought severity indices in the Gunnison watershed, Colorado, since year 2000. Imagery by U.S. Drought Monitor, <https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>, queried for basin HUC #140200 (Gunnison).

1.5.5 Project Implementation

DDWC’s tentative schedule is broken into three major tasks. Two of which may begin prior to construction, if and when a concurrent grant application submitted to the CWCB is awarded. (See section 2 “Project Budget” of this proposal for details.) The proposed schedule lasts about two years, and covers two construction seasons. This complies with the USBR’s anticipated project completion date of 31 Mar 2026.

Table 3: The projects three primary tasks/phases with estimated costs and activity dates.

Task No.	Task Description	Task Start Date	Task End Date	CWCB Grant Funding Request	USBR Match Funding	DDWC Match Funding	Total
				45%	45%	10%	100%
1	Project Management	4/1/2023	5/31/2025	\$ 72,900	\$ 72,900	\$ 16,200	\$ 162,000
2	Engineering	4/1/2023	5/1/2025	\$ 47,610	\$ 47,610	\$ 10,580	\$ 105,800
3	Construction	9/1/2023	6/2/2025	\$ 464,490	\$ 464,490	\$ 103,220	\$ 1,032,200
Total				\$ 585,000	\$ 585,000	\$ 130,000	\$ 1,300,000

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

As the project will be expanding storage located on private properties, already under existing easement agreements, only county level construction permits will be required.

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

Del-Mont Consulting, a local reputable engineering firm who has designed several projects for our water system over the years and who is familiar with the proposed project, has conducted a

review of the current system and has offered to provide the engineering feasibility study to determine where and how much strategically placed storage and other improvements will be needed to achieve the project objectives and provide a detailed design with commitment letter attached.

- *Describe any new policies or administrative actions required to implement the project.*

We have engaged a well-qualified and experienced water system engineer to oversee the design and construction phases of the project as well as help administer the long-term operational and reporting requirements.

1.5.6 Nexus to Reclamation

DDWC's water rights are limited, and requires 33.741 ac-ft/yr of augmentation. An agreement documented in the water rights decree provide for 31.479 ac-ft/yr. That decree requires the remaining 2.262 ac-ft/yr deficit be contracted with the Bureau of Reclamation by releases from the Blue Mesa Reservoir during a few winter months. DDWC is further aware that the Bureau of Reclamation owns and operates the Crawford Water Conservancy District and associated Smith Fork Project that manages the use and allocation of flows from local streams and reservoirs such as the Smith Fork and the Crawford Reservoir. Improving the system's storage and efficiency has the potential for conserving and making better use of decreed Smith Fork water supply to meet local demands. Potential exists for avoiding or reducing the need for supplemental water from Bureau of Reclamation.

2 **Project Budget**

2.1 **Funding Plan and Letters of Commitment**

DDWC is seeking a concurrent grant from the Colorado Water Conservation Board (CWCB) for this project. Award announcements for that grant are expected to be published this fall. So DDWC expects to know those results before it knows the USBR's award determinations. As a consequence, DDWC is currently contemplating a construction start date of 1 Apr 2023, assuming funds become immediately available. The estimated overall construction duration is about two years, or two construction seasons as winter affected production. This places an expected completion milestone in the summer of 2025, the season before this grant's anticipated completion date of 31 Mar 2026.

- *Commitment letters from third-party funding sources should be submitted with your application.*

The Gunnison Basin Round Table (GBRT) has provided a letter of support for DDWC's grant application.

- *Any costs that will be contributed by the applicant.*

DDWC plans to contribute \$130,000, ten percent of the estimated project cost.

- *Any cash requested or received from other non-Federal entities.*

DDWC seeks a concurrent grant of \$585,000 from the CWCB.

- *Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.*

Denial of either grant may severely impact the project. If only one is approved, DDWC may only be able to construct part of the proposed project. It is contemplating use of contract Options as a way to enable it to begin work while waiting for USBR's final decision.

- *Identify any project costs that have been or may be incurred prior to award.*

As stated above, the budget proposal assumes final award notices and funding from CWCB's grant will be provided before the USBR's expected announcement date of 31 Mar 2023. If this happens, DDWC may begin construction with a reduced scope. A larger portion of construction may be tied up in Options to be exercised if USBR awards this grant.

2.2 **Budget Proposal**

Table 4, below, shows this project's cost share plan. It is based on this and one other grant application as well as DDWC's own contribution. The next three tables break down the estimated costs for each of the three major project tasks, respectively. Details are explained in more depth in the budget narrative.

Table 4: Summary budget cost share plan.

Water Project Summary	
Applicant Name:	Deutsch Domestic Water Company, Inc ("DDWC")
Project Name:	DDWC Storage and Efficiency Improvements
<i>This Grant Request</i> , U.S. Bureau of Reclamation	\$ 585,000
Other Sources, Colorado Water Conservation Board	\$ 585,000
Applicant Contribution	\$ 130,000
Total Project Cost	\$ 1,300,000

Table 5: Budget estimate for project management and subcontracting expenses.

Task 1 - Project Management						Subcontracts				Project Total
Sub-task	Principal Manager/Engineer	Water Resources Engineer	Water Operator/Consultants	Administrative Manager		Legal/Contracts	Business/Tax Consultants	Other		
	\$ 175	\$ 150	\$ 100	\$ 100	Subtotal	Lump sum	Lump Sum		Subtotal	
Estimated Hours						Estimated				
Project Initiation & Setup with CWCB	20	10		20	\$ 7,000	\$ 5,000	\$ 2,500	\$ 1,000	\$ 8,500	\$ 15,500
Project Initiation with Engineer	10	20		10	\$ 5,750	\$ 3,000	\$ 1,500	\$ 1,000	\$ 5,500	\$ 11,250
Create "As Built" Drawings	20	10			\$ 5,000			\$ 2,000	\$ 2,000	\$ 7,000
Oversee Feasibility Study of Storage Needs	10	40	10		\$ 8,750					\$ 8,750
Oversee Storage & System Design	20	40	10		\$ 10,500					\$ 10,500
Oversee Control & Automation Upgrades	20	20	10		\$ 7,500					\$ 7,500
Support Geotechnical Work	10	10			\$ 3,250					\$ 3,250
Support Permitting	10	10			\$ 3,250					\$ 3,250
Support Survey Work	10	10			\$ 3,250					\$ 3,250
Order & Receive Major Components & Equip	20	10		30	\$ 8,000					
Oversee Preparation Construction Documents	10	20		30	\$ 7,750	\$ 1,500		\$ 1,500	\$ 3,000	\$ 10,750
Negotiate Contracts & Oversee Construction	120	60		30	\$ 33,000	\$ 1,500		\$ 1,500	\$ 3,000	\$ 36,000
Documentation, Reporting & Accounting	120	60		120	\$ 42,000	\$ 1,500		\$ 1,500	\$ 3,000	\$ 45,000
TOTAL										\$ 162,000

Table 6: Cost estimate for engineering consultancy expenses.

Task 2 - Engineering				
Del-Mont Consulting	Subtotals	CWCB Grant Funding	USBR Match Funding	DDWC Match Funding
		45%	45%	10%
Feasibility Study & System Evaluation	\$ 20,700	\$ 9,315	\$ 9,315	\$ 2,070
Storage & System Upgrade Design	\$ 37,500	\$ 16,875	\$ 16,875	\$ 3,750
Construction Phases	\$ 47,600	\$ 21,420	\$ 21,420	\$ 4,760
TOTAL	\$ 105,800	\$ 47,610	\$ 47,610	\$ 10,580

Table 7: Cost estimate for construction.

Task 3 - Construction				
Sub-task	Unit	Quantity	Unit Cost	Total Cost
Mobilization	LS	1	\$ 25,000	\$ 25,000
Civil & Foundations	LS	1	\$ 170,000	\$ 170,000
Erosion Control	LS	1	\$ 25,000	\$ 25,000
Tank Erections	LS	1	\$ 250,000	\$ 250,000
Upgrade Existing Tanks	LS	1	\$ 74,200	\$ 74,200
Upgrade Existing Distribution	LS	1	\$ 98,000	\$ 98,000
Manholes, Valves, Fittings	LS	1	\$ 50,000	\$ 50,000
Control System Upgrades	LS	1	\$ 100,000	\$ 100,000
4-inch PVC Pipe	LF	3000	\$ 30	\$ 90,000
Incidentals	LS	1	\$ 150,000	\$ 150,000
TOTAL				\$ 1,032,200

2.3 Budget Narrative

DDWC's goal is to submit, concurrently, an application for a similar grant available from the Colorado Water Conservation Board. The ultimate cost share would be 45%, 45%, and 10% for the USBR, CWCB, and DDWC, respectively. Table 4 shows these proposed amounts which sum to \$1,300,000 grand total. The cost estimates are broken down into three primary tasks; project management, engineering, and construction. They are illustrated on the three subsequent tables.

Salaries and Wages

Table 8, below lists the project management staff and their correspondence labor rates used. Refer to Table 5 for the project management cost estimate.

Table 8: Project management staff salaries.

	Name	Wage	Position
1)	Austin Hobbs	\$175 /hr	Project Manager / Engineer (DDWC)
2)	Teryl Stacey	\$150 /hr	Water Resources Engineer
3)	Benny Archuleta	\$100 /hr	Water Operator
4)	Lori Hobbs	\$100 /hr	Administrative Manager

DDWC recognizes a Davis-Bacon requirement is specified for this contract. Wage determination #CO20220003 Heavy Construction applies to this project in Delta and Montrose Counties. A newer version will likely be published and for use when time comes. Construction contracts will be issued with this requirement plus a requirement to include it in subcontracts.

Travel

DDWC intends to hire mostly local Contractors. It does estimate about five trips for its lead water resources engineer at about \$500 per trip for mileage and lodging.

Equipment

DDWC does not plan to purchase construction equipment. Construction activities will be contracted out.

Materials and Supplies

DDWC plans to use U.S. made materials. Main project materials will consist of tanks, piping, fittings, instrumentation, PLCs, etc.

Contractual

DDWC will request proposals from multiple construction vendors.

Environmental and Regulatory Compliance Costs

DDWC is prepared to develop stormwater pollution prevention plans, dust control, notices of intent, etc., if required for the project.

3 Environmental and Cultural Resources Compliance

The proposed project is not located on federal property and does not impose any risk to threatened or endangered species, or designated critical habitat.

- *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?*

DDWC's proposed project is not located on federal property and is not 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.

- *Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?"*

DDWC is unaware of any wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the US".

- *When was the water delivery system constructed?*

The project's water delivery system was initially constructed in 1978 and expanded in 2005.

- *Will the proposed project result in any modification of or effects to, individual features of an irrigation system?*

The project will not result in any modification of or effects to, individual features of any irrigation system.

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

The project does not involve any buildings, structures, or features in the irrigation district eligible for listing on the National Registry of Historical Places,

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

DDWC is unaware of any known archeological 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 disproportionate 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 is not located on tribal lands, nor on lands that might be Indian sacred sites.

- *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.

4 Required Permits or Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

DDWC will seek necessary permits for new wells and water storage as required by state and local law. Routine construction permitting will be the responsibility of the contractor.

5 Existing Drought Contingency Plan

DDWC's Drought Management Plan is posted on its company website at this location.

https://www.deutschwater.com/_files/ugd/f3a344_3c8800ea7dbd46b2b9f5365ef9d87947.pdf

6 Additional Required Material

6.1 Letters of Project Support

The GBRT has provided a letter of support. A copy is included in this application's attachments.

6.2 Official Resolution

- Austin R Hobbs is the DDWC official with legal authority to enter into an agreement.
- The DDWC board of directors, governing body, and appropriate officials have reviewed and fully support the application submitted.
- The DDWC has the capability to provide the amount of funding and/or in-kind contributions specified in the funding plan.
- DDWC will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement
- DDWC has conducted an official, mandatory resolution meeting as requirements set forth above.

6.3 Overlap or Duplication of Efforts Statement

DDWC hereby affirms that there is no overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. DDWC hereby also affirms that the proposal submitted for consideration under this program is not in any way duplicative of any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal.

6.4 Conflict of Interest Disclosure

Teryl Stacey is a current, full-time employee of the U.S. Army Corps of Engineers. His position is administrative contracting officer for military construction at Nellis and Creech Air Force Bases in Nevada. DDWC is issuing this as a formal disclosure but does not foresee a possible conflict of interest with the USBR or its funding because the agencies are different and the missions are unrelated.

6.5 Uniform Audit Reporting Statement

DDWC will submit audit information if required.

6.6 Certification Regarding Lobbying

DDWC has had no lobbying activities.

7 Mandatory Federal Forms and Attachments

- SF424 Application for Federal Assistance
- Project Abstract Summary
- Drought Management Plan
- Augmentation Plan
- Engineering Support Letter
- DDWC Presentation to GBRT
- GBRT Support Letter

Gunnison Basin Roundtable

June 13, 2022

Colorado Water Conservation Board

1313 Sherman Street, Room 718

Denver, Colorado 80203

Attn: Board of Directors

Re: Deutsch Domestic Water Storage Project Grant Application

We appreciate the principals of the Deutsch Domestic Water Company (DDWC) making a presentation at our May 16, 2022 meeting to introduce their water company and water planning goals.

We understand the DDWC is in the final stages of completing a Drought Management Plan (DMP) and hoping to receive a letter of support from the GBRT for installing additional strategically placed storage to maximize the use of existing decreed water rights to improve operational efficiencies, mitigate drought impacts, and conserve water resources.

We also see potential synergies between the DDWC proposed water storage project and the other Crawford area projects that rely on the Smith Fork for water supply.

We agree and hereby fully support DDWC's proposed water storage project as being an essential cost-effective measure for maximizing the use of existing decreed water rights to meet the long-term needs of its tap holders, under both normal and drought conditions, that results in the conservation of water resources closely aligned with GBRT and GBIP objectives.

Sincerely,



Steven A. Anderson

Chair



DEL-MONT CONSULTANTS, INC.
ENGINEERING ▼ SURVEYING

125 Colorado Ave. ▼ Montrose, CO 81401 ▼ (970) 249-2251 ▼ (970) 249-2342 FAX
www.del-mont.com ▼ service@del-mont.com

May 13, 2022

Randy Hobbs
Deutsch Domestic Water Company
Crawford, CO

Re: Letter of intent to provide engineering services for the Deutsch Domestic Water Company – Water System Storage and Efficiency Evaluation & Upgrades, Crawford, CO (DMC# P22017)

Randy,

Thank you for engaging Del-Mont Consultants to participate in your potential water system evaluation and upgrade project. It is our understanding that the Deutsch Domestic Water Company (DDWC) is in the process of applying for a grant from the Colorado Water Conservation Board (CWCB) to fund the addition of strategically placed treated water storage. This additional storage will help better meet on-peak demands, improve operational efficiencies, mitigate drought impacts, and help meet anticipated load growth given the limited supply.

Del-Mont's role will be to provide services as described below. Please keep in mind that this letter of intent is not intended to be a formal contract and the costs presented are 'best guess' budget estimates based on our experience with similar projects. Once you have CWCB project approval, we can more accurately define our services and better predict the costs.

A. Feasibility Study and Overall System Evaluation. Beginning with an overall site walk of the entire system, we will utilize as-built drawings, historical demand records, and current augmentation plans to evaluate the entire existing water storage and delivery system. The study will identify areas where additional storage or system upgrades are necessary and will provide recommendations as to the amount of storage required, type of tank (assumed to be HDPE tank similar to existing), recommended physical location, and connection pipe routing. We have also assumed that a formal report of our findings will be prepared to summarize recommendations and so that the DDWC can prioritize and budget for capital improvement projects. No formal design will be completed with this initial task.

B. Water Storage & System Upgrade Designs. Utilizing the recommendations from the feasibility study, a formal design will be prepared for all of the DDWC approved system upgrades. Based on initial discussions, we have assumed that storage will likely be added in four separate locations throughout the system. A topographic survey will be required at each selected site and will serve as the basis for the storage tank and piping designs. Construction cost estimates and anticipated construction schedules will also be prepared for each portion of the project to allow the DDWC to prioritize projects and budget accordingly.

C. Construction Phase Services. Upon completion of the system upgrade designs, we would continue to see the project through construction. We anticipate this including assisting DDWC in the bidding and contractor selection process, submittal review, response to contractor questions, construction staking as necessary, engineering oversight as necessary, and project close out.

Again, it is important to note that the scope of services described above and the costs listed below are based on preliminary discussions, the many assumptions described throughout (number of improvements, pipe routing, tank sizes, duration of construction, etc.), and our experience with similar projects. The exact scope of work and budgets will be defined as the project progresses through each phase and with each approval.

Our intent is to bill our time on a 'Time and Materials' basis according to current rates.

Summary of Estimated Potential Costs

Feasibility Study & System Evaluation	\$ 20,700
Storage & System Upgrade Designs	\$ 37,500
Construction Phase Services	\$ 47,600
Subtotal	\$ 105,800

Thank you again for choosing us to be your engineer for this project. Please don't hesitate to contact me if you need any additional information or assistance with the CWCB application. We look forward to working with you and are excited to help improve your water system.

Sincerely,



David Schieldt, P.E., CFM
Vice President, Del-Mont Consultants, Inc.