Paradise Irrigation District
6332 Clark Rd, Paradise, CA 95969 · 530-877-4971 · Fax: 530-876-0483 · www.pidwater.com

AGENDA

PARADISE IRRIGATION DISTRICT
AD HOC CUSTOMER RECOVERY SUPPORT COMMITTEE
6332 CLARK ROAD, PARADISE, CA 95969

TUESDAY, JANUARY 17, 2023 ~ 8:30 AM

Committee Members: Directors Shelby Boston and Chris Rehmann
PID Staff – Tom Lando, Mickey Rich, Brett Goodlin
Public Members – Lee Brown, Cliff Jacobson, Bill Martin, Carla Minckler, Dee Riley

- *The Board of Directors is committed to making its meetings accessible to all citizens. Any persons requiring a special accommodation to participate, is requested to contact the District Secretary at 530-877-4971, extension 2039 at least 72 hours in advance of the meeting.*

- *To participate in the meeting remotely:*

  Via Zoom Meeting: https://us02web.zoom.us/j/88192841237
  Telephone: +1 669 900 6833 US (San Jose)
  Meeting ID: 881 9284 1237
  To improve participation during the meeting, we will be accepting public comments from Zoom Meeting participants during the meeting. The Board cannot take action on any matter not on the agenda. Public comments specific to an agenda item will be read directly after the agenda item and before the Board votes on an item.

  Via Email or Telephone: Public comment will be accepted by email with the subject line PUBLIC COMMENT ITEM NO. ___ to gborrayo@paradiseirrigation.com or telephone (530) 876-2039 prior to 8:00 a.m. on the day of the meeting.

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1. **Opening & Introductions**

2. **Public Participation**
   This is the time for members of the public to present items not on the agenda. No action can be taken on these items, but they may be placed on future agendas for consideration. Comments should be limited to a maximum of three minutes duration. If more time is needed, communication may be submitted in writing to committee members, or placed on the agenda for a future committee meeting.

3. **Discussion: Non-Participating Parcel Owners (Discontinued Service)**: Review and discussion of information and options relating to non-participating parcels to provide recommendations to the Board of Directors.

4. **Consider Establishing Future Meeting Date**

5. **Adjournment**

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DATE: January 10, 2023

TO: PID Ad Hoc Customer Recovery Support Committee

FROM: Tom Lando, District Manager

Subject: Non-Participating Parcel Owners (Discontinued Service)

Background:

Pre-Campfire there were approximately 10,500 service connections. After the fire, there were approximately 1,500. The District still had to provide the same level of staffing as pre-fire because the lots using water were distributed throughout the community.

The numbers shown below are as of December 31, 2022:

4,861 fully active lots

4,067 active but sealed (customers paying $21.49 a month but receiving no service)

Approximately 1,700 Inactive parcels (paying nothing to the District)

700 Undeveloped lots

The Issue:

The 4,067 parcel owners are paying the sealed meter rate (discontinued service) of $21.49 per month, both to keep the District viable and likely for some customers, because they thought they were maintaining their ability to reconnect when they decided to rebuild. Currently, an inactive parcel simply pays $30 to reconnect to the District.

Currently, the 1698 parcel owners can reconnect whenever they choose at no additional cost and the owners of the 700 undeveloped lots can connect simply by paying the capacity fee.

The system is unfair and leaves the District with inadequate revenue to maintain service long term.

The Board of Directors has already provided direction to staff to start the process to charge the disconnected parcels a fee.

Issues and Recommendations and/or request for direction:

<u>Issue- When/if to impose fees and charges</u>.

As you read through the issues and recommendations, you also need to consider when these should go into effect. The Board has structured the current system so non- participating owners can rejoin without

any cost with the rationale being that the Board of Directors wants to encourage/assist the rebuild. It has now been four years since the 2018 Camp Fire. If the Board decides to impose any of the fees discussed below, should the charge go into effect immediately, or should an additional grace period be provided?

Recommendation- Provide direction- may decide it will differ from issue to issue.

Issue-Monthly Charge or Assessment

Under Proposition 218 there is a different process if the Board decides to charge a fee or levy an assessment. The fee requires only a protest vote by those being charged. If less than a majority protest, the fee would go into effect. However, our legal counsel says that this is subject to challenge and the better process would be to levy the charge through an assessment which goes onto property taxes. This would take a positive vote and would allow all District landowners to vote (note: Only those 1693 parcels would be charged, NOT all landowners).

Recommendation- Use the assessment process

Issue-Charge $21.49 or $42.98

The current charge for those not receiving water under the sealed rate is currently $21.49 per month. A financial study was completed by an independent firm, (Bartle Wells Financial Advisors), which indicates this rate should be doubled or $42.98. The disconnected parcels have paid zero fees since they discontinued service.

Recommendation- Charge $42.98/month

Issue-Charge just the disconnected parcels or the vacant undeveloped parcels as well

Legal counsel has suggested that it makes sense to charge both the disconnected parcels and the vacant undeveloped parcels the monthly fee. However, many of the undeveloped parcels cannot meet current septic perk tests and therefore, either cannot be developed, or can only be developed with very limited use.

Recommendation- Provide direction to staff

Issue-Since the owners of the 1693 parcels decided to disconnect and have not participated in helping the recovery, should they be charged the required water treatment plant capacity fee?

If an undeveloped lot pursued a building permit, they would be required to pay all the development impact fees such as road fees, school fees and water treatment plant fees. The current capacity fee for a home is $4,376. This fee was last updated in 2005. Under the study done by Bartle Wells, the fee should

be $11,627. The Finance Committee has recommended to the Board of Directors that the fee be updated.

There are three options to consider:

1. Charge no capacity fee under that argument they were once customers of the District

2. Charge the full capacity fee of $11,627 since they abandoned the District

3. Charge $7,251 giving them credit for the $4,376 that the impact fee was at the time for the fire.

Recommendation- Charge the non-participating parcels $7,251

Issue- Charge for meter, backflow, and lateral installation

Currently, when a building permit is issued for a parcel that has never been developed the owner is charged the total cost of the installation including labor, equipment, materials and overhead (LEMO) for the District to go back and install the meter, backflow device and service lateral. The total cost varies at each installation depending on the LEMO charges associated with installing the service lateral.

Recommendation- Charge the same fee as the District would charge for a new building permit for those who disconnected from the District.

Issue- Should the District install laterals for all the disconnected parcels?

At the current time, the Board is discussing whether to install laterals to all parcels in the District (this may be required as part of the monthly fee or assessment- to be determined). This would mean installing an estimated 1700 additional service laterals. The advantage is that once complete, no roads would need to be torn up and patched again. The cost to the District would be in the range of $3 million.

Recommendation- Install laterals to all parcels.

Issue- Should the owners of disconnected parcels pay for the laterals when they reconnect?

Recommendation- Provide direction

Process/Next Steps:

To restate the information discussed above, the Board has already directed staff to start the process for the disconnected parcels. Under Proposition 218 requirements there are two different options for accomplishing this:

The first is imposing a fee on the disconnected parcels which would require a protest process in which those owners being assessed the fee, could protest its imposition. A majority protest would stop the fee from being imposed.

The second, which is the approach recommended by our legal counsel, is to go through an assessment process. In this case, all owners in the District would have the opportunity to vote and the assessment would only go into effect if there was a majority positive vote.

Prior to either process the District will need to hire a consultant/engineer to validate the work of Bartle Wells and to demonstrate that the proposed charges are reasonable. The cost of the process should be in the range of $100,000 plus, and perhaps more, depending on the notices the Board decides to provide.

The entire process is likely to take 9-12 months to complete.

Attachment: PID Study dated 10.7.2022 by Bartle Wells Associates

Paradise Irrigation District
Study 2022

Water Capacity Fee
Draft Tables
10.7.2022

BARTLE WELLS ASSOCIATES

Independent Public Finance Advisors

Table 1
Paradise Irrigation District
Current & Proposed Water Capacity Fees

Meter Size	Meter Ratio	Current Fee	Proposed Fee
¾"	1.00	$4,376	$11,627
1"	1.67	$7,293	$19,378
1-1/2"	3.33	$14,587	$38,756
2"	5.33	$23,339	$62,010
3"	10.00	$43,760	$116,268
4 "	16.67	$72,933	$193,780

Table 2
Paradise Irrigation District
Existing Asset Valuation and Financial Adjustments

Description	Replacement Cost Estimate (2022)*	Replacement Cost New Less Depreciation*	Percent Depreciated
Land Valuation	$2,192,034	$2,192,034	***0%***
Depreciable Fixed Assets**			
Pipes inc. Magalia Bypass Pipe	$85,676,946	$26,242,320	***69%***
Water Storage (Reservoir and Tanks) inc. Raw Water Tank	23,500,000	5,166,667	***78%***
Raw Water Pump Station and Pump Station 2	2,131,000	889,600	***58%***
Valves	6,458,000	2,096,000	***68%***
Buildings	3,837,503	2,957,877	***23%***
Wells D and E	242,529	141,265	***42%***
Magalia and Paradise Dams	6,494,387	2,066,793	***68%***
19 MGD Water Treatment Plant inc. Diversion Dam	26,627,394	12,435,485	***53%***
Subtotal	$154,967,759	$51,996,007	***66.4%***
Total	**$157,159,793**	**$54,188,041**	***65.5%***
Financial Adjustments			
Cash Reserves		**$88,902,092**	
Less: Outstanding Principle on Debt		**-$3,682,395**	
Subtotal		**$85,219,697**	
Total District Asset Value		**$139,407,738**	

**Source: Agenda 2022-02-16 Complete Packet pg. 65*

***Excludes Services and Backflow Preventers and Vehicles and Equipment*

Table 3
Paradise Irrigation District
Proposed Capacity Charges -- Buy In Method

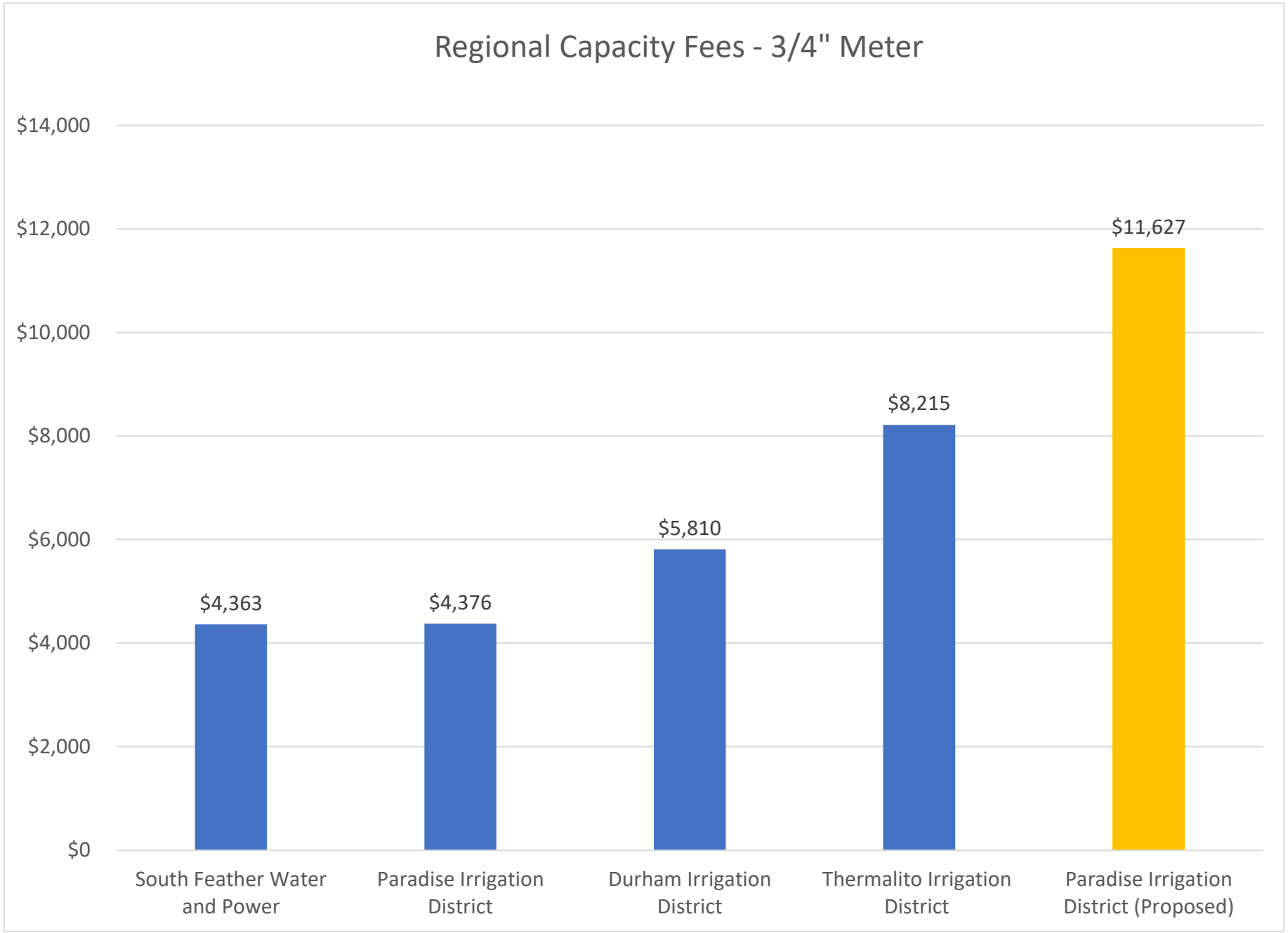
Projected Water Usage*	Current	Ultimate (2045)
Est. Annual Demand - Acre Foot Per Year (AFY)*	1,995	4,365

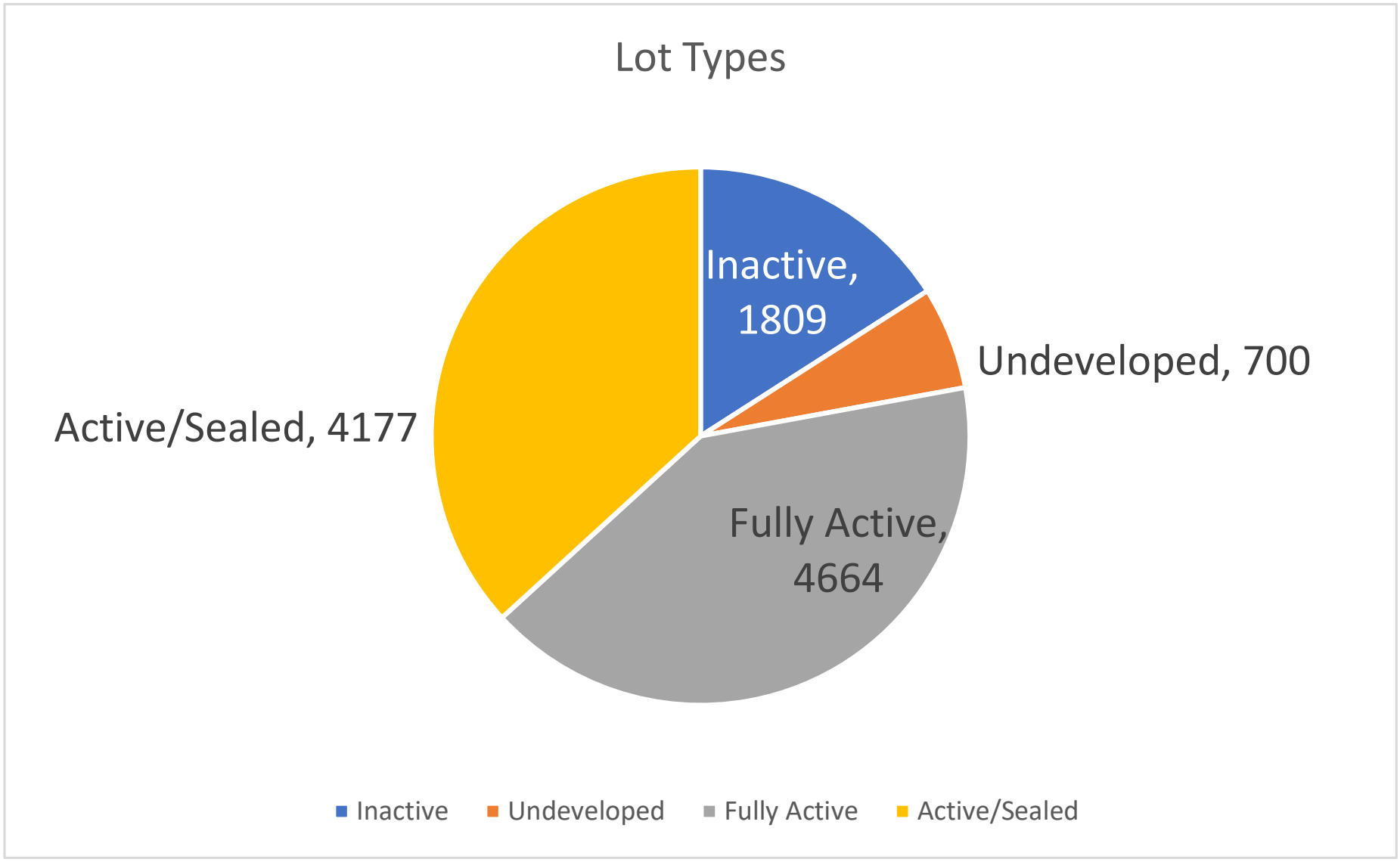
District Asset Value $139,407,738

$/AFY **$31,938**

Meter Size	Meter Ratios**	Average Demand (AFY)***	Proposed Fee
¾"	1.0	0.36	$11,627
1"	1.67	0.61	$19,378
1-1/2"	3.33	1.21	$38,756
2"	5.33	1.94	$62,010
3"	10.00	3.64	$116,268
4 "	16.67	6.07	$193,780

*Paradise Irrigation District 2020 Urban Water Management Plan ES Table 1
**Based on American Water Works Association (AWWA) standard ratios
**Based on average demand of 325 gallons per day per meter equivalent


Regional Capacity Fees - 3/4" Meter
$14,000
$12,000
$10,000
$8,000
$6,000
$4,000
$2,000
$0
$4,363
$4,376
$5,810
$8,215
$11,627
South Feather Water and Power
Paradise Irrigation District
Durham Irrigation District
Thermalito Irrigation District
Paradise Irrigation District (Proposed)


Lot Types
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Undeveloped, 700
Fully Active, 4664
Active/Sealed, 4177
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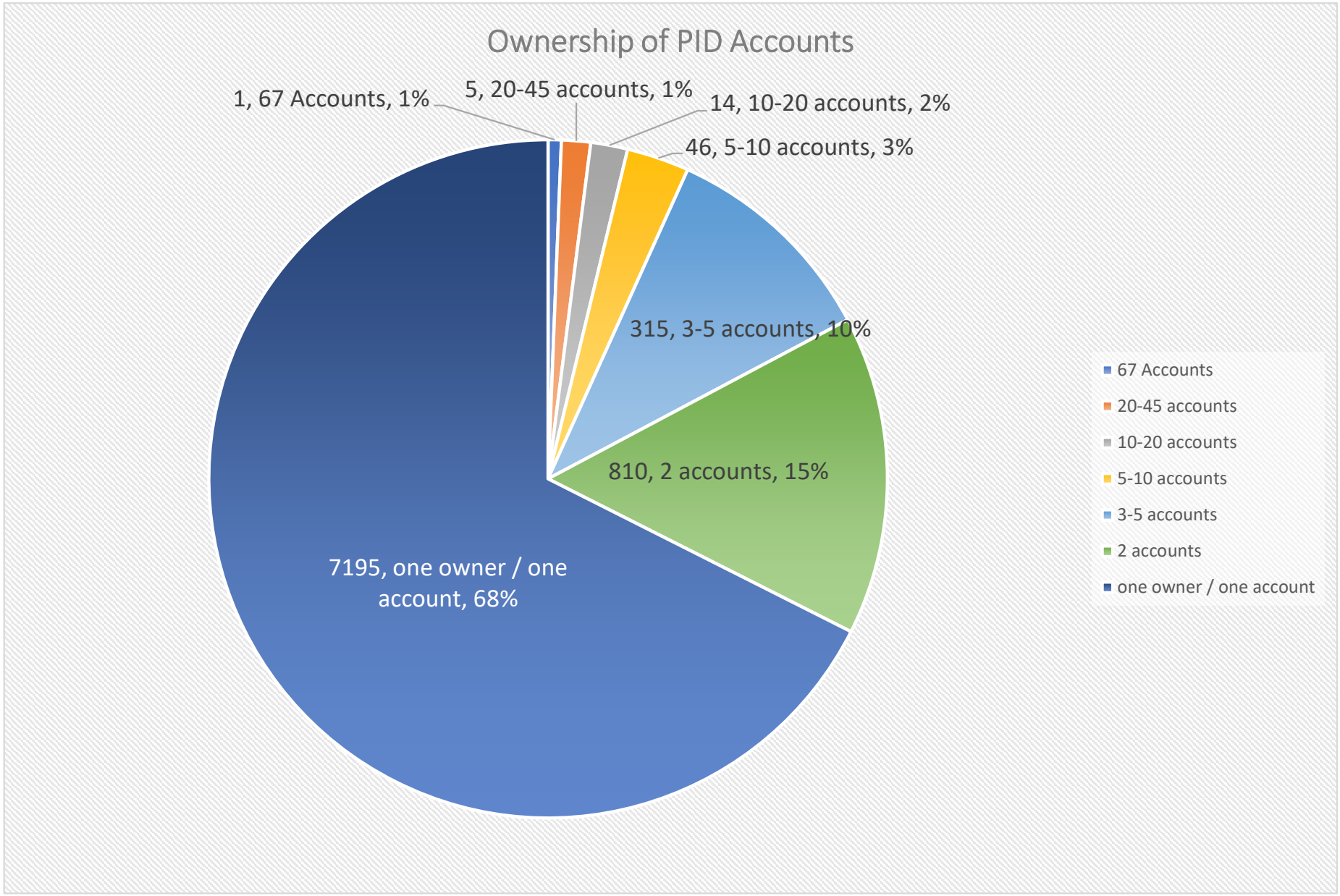
Undeveloped
Fully Active
Active/Sealed


Ownership of PID Accounts
1, 67 Accounts, 1%
5, 20-45 accounts, 1%
14, 10-20 accounts, 2%
46, 5-10 accounts, 3%
315, 3-5 accounts, 10%
810, 2 accounts, 15%
7195, one owner / one account, 68%
67 Accounts
20-45 accounts
10-20 accounts
5-10 accounts
3-5 accounts
2 accounts
one owner / one account

"Discontinued Service" meters will not pay a monthly service charge, but the service line to the meter will not be replaced if it is found to leak, or if the District replaces the mainline that previously served the property.

Meter installation and relocation charges shall be fixed from time to time by the Board and be available upon request at the District business office.

6.12.5 Capacity Fee –

A capacity fee has been established and charged to customers to provide funds to build certain facilities needed for growth within the District. The capacity fee calculation takes into consideration both the value of the existing system, as well as anticipated alternative water supplies needed to supply new connections. A capacity fee schedule for new meters and changes in meter size shall be fixed from time to time by the Board and be available upon request at the District business office.

The capacity fee may be financed by the owner of the property through the District at fixed rate set to the prime rate of the District's Bank plus 2%, for a maximum term of 7 years, with an option by District to call upon any sale, transfer, or assignment.

6.12.6 Construction/Hydrant Meters –

Construction/Hydrant meters will be available, unless restricted due to water supply conditions, as provided in this manual.

6.12.7 Building/Construction Meters –

Building/Construction meters for new construction shall be the same as any other regular active meter except that they shall be eligible for the lowest "service" charge for the first six months or until the building is transferred or occupied.

6.12.8 Estimated Meter Readings –

Bills for service will be based on an estimate if a meter fails to register the volume of water consumed or cannot be read. In estimating consumption, due consideration will be given to fluctuations in usage caused by seasonal changes or known service interruption. Where a meter cannot be read without undue difficulty because of obstruction, the customer will be notified and requested to correct the condition.

6.13 CUSTOMER PRESSURE REGULATING & RELIEF VALVE RESPONSIBILITY

It shall be the responsibility of each water service customer to install pressure regulating and pressure relief valves within the customer's private water pipe system in accordance with the Health and Safety Code and applicable building codes.

Amended 12/20/17: §6.5, 6.6
Amended 10/17/18: §6.7, 6.7.1, 6.7.2, & 6.8
Amended 01/16/19: §6.6.4, 6.12.4, 6.14
Amended 03/17/21: §6.14

Capital Improvement Plan Development Memorandum

Date: January 6, 2022

Prepared by: Cindy Bertsch, PE
Colleen Boak, PE
Sami Kader, PE
Erik Ma, EIT
Esmeralda Diego, EIT

Contents

Project Background and Purpose

Paradise Irrigation District (PID) requested a list of owned assets including the replacement and remaining values to support an ongoing Financial Analysis for the District. This memorandum documents how the asset list was created and how replacement and remaining values were assigned.

Asset List

Assets from GIS Data

The pre-fire AutoCAD distribution map that was maintained by PID was converted to GIS by WebSoft Developers following the 2018 fire and has been maintained by Water Works Engineers in coordination with WebSoft Developers. The data used as the basis for the pipes, valves, and services were exported from the PID distribution system GIS files on November 1, 2021.

Pipes

The PID GIS pipe data included pipe material, main length, pipe diameter, year of installation, and main status for the majority of the distribution system. The following assumptions were made about the pipe data.

1. Privately owned pipes are assumed to be the most common pipe material, steel.
2. Privately owned pipes have an assumed diameter of 1.5 inch, which was the most common size on the Private Pipeline Summary provided by PID.
3. If a pipe is abandoned or removed, then it is assumed to have zero value.
4. Any pipe segment under 1 foot in length is assumed to have zero value.
5. Main lengths were rounded to the nearest foot.
6. Approximately 30 feet of pipe with no material identifier was assumed to be the most abundant type of pipe material, steel.
7. If the main installation date was missing from the data, the mean of all the main installation dates of that particular material was used to calculate the remaining value.
8. The 2008 42 inch HDPE raw water pipeline is from the asset data spreadsheet provided by PID
9. The 1993 Magalia Reservoir Bypass Pipeline and Diversion Dam drawings by Harlan Tait and Associates were provided by PID.

Valves

The PID GIS valve data included valve type, address, year of installation, and intersection water main data for most of the valves. The following assumptions were made about the valve data.

1. GIS data, created from the CAD files, had limited valve size information. As such, valve sizes were also assumed based on input from PID operations or based on the water main the valve intersected.
2. Blowoff valves were confirmed by PID Operation to mostly be 2" valves with only 5 percent being 1" valves.

3. Air Relief valves were confirmed by PID Operations to be mostly 2" valves with 20 percent being 1" valves.
4. Per PID, hydrant valves are assumed to not be PID assets and were assigned no value.
5. For all other valve types, where size information was not available, the size of the valve was assumed to be the same as the size of the water main which it intersects. Where no intersecting water main information was available, the size was assumed to be equal to the most common size for that valve type.
6. Where no installation year of a valve was available, the installation year was assumed to be the same as that of the water main which it intersects. Where no intersecting water main information was available, the installation year was assumed to be the average install year for that valve type.
7. A valve with the CAD label "Buried" is assumed to be a gate valve.
8. The two "Tie" valves with no information are not included.

Service Laterals and Backflow Preventers

After the 2018 Camp Fire, PID's service laterals required significant replacement efforts. The service lateral count is assumed as the sum of the surviving service laterals and the number of meters PID plans to install by the beginning of the year 2023. Backflow preventers are included in the water services category. Although some backflow preventers are customer owned, the majority are assumed to be owned by PID. All services require a backflow preventer. For simplicity, it is assumed that the new services will be installed in 2021 and the surviving services were installed in 2000.

Assets from Asset Master Spreadsheet

The PID Fixed Asset Master excel spreadsheet dated June 2021 was provided by PID on November 10, 2021. It was used to estimate the value of PID's Magalia and Paradise dams, corporation yard and office buildings, land, equipment, Pump Station 2, and wells. Additionally, some water treatment plant costs were from the provided asset data that were labeled "water treatment plant". The Magalia bypass pipeline is included in the pipe cost. The lifespans and value of each asset was provided. The following assumptions were made about the equipment and building data.

1. PID does not own any roads, so they are not considered PID assets.
2. Software and training are not PID assets.
3. As PID does not maintain the recreation facilities, they will not be counted as PID assets.
4. Surveys and reports conducted in the past are not PID assets.
5. Land purchased is a PID asset, however structures on PID land that are not maintained by PID are not considered assets
6. Piping and valves are not included because they were accounted for in the GIS data except for the Magalia Bypass Pipe.

Assets from Other PID Documentation

Pump Station

The Pump Station 2 building information was from the August 1967 Booster Pump Station plans prepared by Dean S. Kingman Consulting Engineers. Pump Station 2 pump information was based on the PID Fixed

Asset Master excel spreadsheet. The engine pump installation date was based on information from Bill Taylor at the November 18, 2021 workshop. The Tesla system information was from the purchase contract.

The Raw Pump Station building, pump horsepower, and raw water tank was based on the March 1996 Raw Water Pumping Station drawings by SPH Associates.

Reservoir and Tanks

The reservoir and tanks information were based on the 2020 Urban Water Management Plan. The Raw Water Tank information was based on an estimated volume assumed from Google maps.

Water Treatment Plant

The Water Treatment Plant drawings dated March 1993 and prepared by Brown and Caldwell were used as the basis for the Water Treatment Plant evaluation. PID staff including Blaine Allen, District Engineer and Bill Taylor, Treatment Plant Operations Supervisor, provided input on the treatment plant components at a 11/18/2021 review workshop. The Tesla system information was from the purchase contract.

Land

Two additional PID owned parcels were not included in previously mentioned documentation. Parcels 053-150-198-000 and 053-150-199-00, 6352 and 6350 Clark Road respectively, border the PID Corporation Yard and are owned by PID. The value of both the land and improvements on the land were determined from the Parcel Search (Assessed Value Lookup) provided on the Butte County municipal website. Both properties were assessed in 2021.

Total and Remaining Asset Values

Each asset had both a total value and remaining value assigned to it determine the combined inventory of PID.

Total Value

Total value is comprised of the replacement cost in today's dollars.

Pipes

The total value of the pipe was calculated by multiplying main length by diameter of pipe and a cost per linear foot.

Valves

Valve cost was determined based on unit cost or a cost per inch of valve size.

Services and Backflow Preventers

Services and backflow preventers were based on a unit cost per service. The unit cost was based on recent construction data.

Tanks and Reservoirs
Storage costs were based on a cost per gallon basis.

Pump Station
Pump station costs were from PID's asset list.

Buildings, Equipment, Dams, and Well
Value was based on values provided in PID's asset list with the exception of the buildings on 6352 and 6350 Clark Road Paradise CA, whose values were determined from the 2021 assessment by Diane Brown, Assessor. For these two properties the total value of the buildings was determined from the 2021 assessment Improvement Value.

Water Treatment Plant
Treatment components were based on a unit price.

Land
Values were based on values provided in PID's asset list with the exception of the land on 6352 and 6350 Clark Road Paradise CA, whose values were determined from the 2021 assessment land value.

Remaining Value

If the remaining value was not provided by PID, then the remaining value factored in the assets' date of installation and average design life for each component. The following equation was used.

$$\frac{Design\ Life - \ (Current\ Year - Installation\ Year)}{Design\ Life}\ x\ Total\ Value = Remaining\ Value$$

If the age of the asset in the field exceeded its expected design life, then it has zero remaining value.

Annual Operations and Maintenance Costs

The annual operations and maintenance costs were assumed at 5 percent per year of the total cost.

Annual Depreciation

Annual depreciation was calculated based on the method used in PID's Asset List. The following equation was used to calculate annual depreciation for 5 years in the future from the Current Year in the Assumptions sheet.

$$\frac{Original\ Cost}{Life\ span} = Annual\ Depreciation$$

If an asset was past its lifespan, annual depreciation is zero dollars. No annual depreciation was calculated for land and planned projects.

Capital Project List

PID has identified a list of potential capital projects and their estimated cost. Most of the projects are listed on the PID FY 20221.22 Budget Capital Projects Summary. The annual operational and maintenance costs were assumed at 5 percent per year.

Equipment Replacement

Equipment refers to both vehicles and miscellaneous equipment provided in PID's Asset List. Equipment replacement costs were determined based off the PID Asset List's lifespan and the original cost of the equipment. Any equipment that exceeded its lifespan would be assumed to be replaced in the year after the Current Year on the assumptions sheet. The cost of the equipment replacement is determined based on the original cost + additional inflation costs according to the formula shown below.

$$Original\ Cost\ x\ Inflation\ Rate^{Year\ Z-Year\ Aquired} = Replacement\ Cost\ in\ Year\ Z$$

Inflation was assumed to be at a constant 3% increase per year. Inflation rate can be changed on the Assumptions Sheet under Current Year. A summary of a focused group of critical vehicles and equipment identified by PID for upcoming replacement is shown in Appendix A. A full list of vehicle and equipment assets can be found in the Excel-based analysis spreadsheet.

Detailed Asset Information

The detailed asset information is included in Appendix A. Values highlighted in yellow on the Assumptions page are linked to the calculation paged for easy list modifications on the Assumptions page.

Appendix A - Detailed Asset Information

Summary

					Depreciation per Year				
	Total Value	**Remaining Value**	**Annual O&M Percentage**	**Annual O&M**	**2023**	**2024**	**2025**	**2026**	**2027**
Pipes inc. Magalia Bypass Pipe	$85,676,946	$26,242,320	5%	$4,284,000	$630,596	$622,272	$621,091	$615,539	$609,855
Valves	$6,458,000	$2,096,000	5%	$323,000	$92,432	$88,424	$88,196	$87,368	$86,210
Services and Backflow Preventers	$23,800,000	$20,299,429	5%	$1,190,000	$800,571	$800,571	$800,571	$800,571	$800,571
Water Storage (Reservoir and Tanks) inc. Raw Water Tank	$23,500,000	$5,166,667	5%	$1,175,000	$837,500	$837,500	$837,500	$837,500	$837,500
Raw Water Pump Station and Pump Station 2	$2,131,000	$889,600	5%	$107,000	$41,728	$41,728	$41,728	$41,728	$41,728
Buildings	$3,837,503	$2,957,877	5%	$192,000	$98,199	$98,199	$98,199	$98,199	$98,199
Land	$2,192,034	$2,192,034			Not Applicable				
Vehicles and Equipment	$2,301,578	$424,204	5%	$115,000	$74,256	$74,214	$68,444	$64,166	$56,146
Wells D and E	$242,529	$141,265	5%	$12,000	$5,064	$5,064	$5,064	$5,064	$5,064
Magalia and Paradise Dams	$6,494,387	$2,066,793	5%	$325,000	$86,350	$86,350	$86,350	$86,350	$68,194
19 MGD Water Treatment Plant inc. Diversion Dam	$26,627,394	$12,435,485	5%	$1,331,000	$590,259	$590,259	$590,259	$562,526	$559,320
Total	**$183,261,372**	**$74,911,673**		**$9,054,000**	**$3,256,956**	**$3,244,581**	**$3,237,402**	**$3,199,011**	**$3,162,786**
Planned Projects	$33,769,200	Not Applicable		$1,663,460	Not Applicable				

Assumptions

Current Year	2022
Inflation per Year	3%

Asset Type	Units	Unit Price	Life Span (years)	Assumed Install Year	Assumed Size if not provided (in)
Pipe	$/in-LF	$10	See table below		
Ball Valve (DKR)	$/in	$300	50	1997	1
Gate Valve	$/in	$300	50	1987	8
Gate Valve (12" +)	$/in	$290	50	1990	12
Butterfly Valve	$/in	$585	50	1994	20
4" Wharf head Hydrant Valve	$/in	$0	50	1974	N.A.
6" Hydrant Valve	$/in	$0	50	1990	N.A.
ARV	each	$750	25	N.A.	N.A.
Blowoff	each	$3,000	50	N.A.	N.A.
Flow Control	each	$2,500	35	N.A.	N.A.
Regulator (Pressure)	each	$3,000	35	N.A.	N.A.
Water Service	each	$5,000	30	N.A.	N.A.
Backflow Preventer	each	$1,000	25	N.A.	N.A.
Earthen Reservoir	gallons	$2.0	60	N.A.	N.A.
Steel Tank	gallons	$2.5	75	N.A.	N.A.
Building	square feet	$600	75	N.A.	N.A.
Pumps at Treatment Plant	horsepower	$1,000	25	N.A.	N.A.

Pipe Type	Life Span (years)	Assumed Install Year	Pipe Cost Factor	Assumed Size if not provided (in)
HDPE	70	2018	1	N.A.
PVC (PVC, C900)	70	1999	1	N.A.
Ductile Iron	100	2004	1	N.A.
Asbestos Cement	70	1981	1	N.A.
Steel Pipe (Galvanized, Cement Lined)	50	1967	1	N.A.
Copper (Private)	50	1980	1	N.A.
Cast Iron	120	1953	1	N.A.
Private Pipe (steel)	50	1967	1	1.5

Note:

1. Pipe Cost Factor can be used to adjust the unit price of different pipe materials

Distribution System Pipes

Pipe	Total Quantity (LF)	Serviceable quantity (LF)	Pipe Total Value	Pipe Remaining Value
HDPE	11,040	10,760	$2,437,440	$1,925,230
PVC (PVC, C900)	373,140	370,990	$27,833,060	$19,052,480
Ductile Iron	2,410	2,410	$450,080	$362,910
Asbestos Cement	95,330	94,540	$6,585,540	$2,684,440
Steel Pipe (Galvanized, Cement Lined)	480,470	39,470	$45,031,610	$127,860
Copper (Private)	280	0	$4,890	$0
Cast Iron	3,240	2,600	$191,500	$65,170
Non-PID Owned (Private)	17,940	0	$238,480	$0
Totals	**983,850**	**520,770**	**$82,772,600**	**$24,218,090**

Notes:

1. All copper pipe is also Private pipe
2. Serviceable Quantity is Total Quantity pipe minus pipe that is removed, abandoned, under 1 ft in length, has missing information (unknown), or is past its life span.
3. The Magalia Bypass, roughly 6,400 LF of HDPE pipe, is not included in the table above

Depreciation

	Years				
Pipe	2023	2024	2025	2026	2027
HDPE	$34,821	$34,821	$34,821	$34,821	$34,821
PVC (PVC, C900)	$397,615	$397,615	$397,615	$397,615	$397,615
Ductile Iron	$4,501	$4,501	$4,501	$4,501	$4,501
Asbestos Cement	$94,079	$94,079	$94,079	$94,079	$94,079
Steel Pipe (Galvanized, Cement Lined)	$25,386	$17,062	$15,881	$10,330	$4,645
Copper (Private)	$0	$0	$0	$0	$0
Cast Iron	$1,596	$1,596	$1,596	$1,596	$1,596
Non-PID Owned (Private)	$0	$0	$0	$0	$0
Totals	**$557,998**	**$549,673**	**$548,492**	**$542,941**	**$537,256**

Valves

System Valves	Total Quantity	Valve Total Value	Valve Remaining Value
ARV	198	$148,500	$11,460
Blowoff	638	$1,914,000	$598,560
Flow Control	3	$7,500	$1,714
Regulator (Pressure)	31	$93,000	$15,429
Total System Valves	**870**	**$2,163,000**	**$627,163**

Control Valves	Total Quantity	Valve Total Value	Valve Remaining Value
Ball Valve (DKR)	183	$403,500	$186,696
Gate Valve	400	$336,450	$62,256
Gate Valve (12" +)	1,416	$3,295,620	$1,116,446
Butterfly Valve	23	$259,740	$103,779
4" Wharf head Hydrant Valve	272	$0	$0
6" Hydrant Valve	1,118	$0	$0
Total Control Valves	**3,412**	**$4,295,310**	**$1,469,177**

Depreciation

	Years				
System Valves	**2023**	**2024**	**2025**	**2026**	**2027**
ARV	$3,630	$450	$390	$390	$360
Blowoff	$26,100	$25,680	$25,620	$25,380	$24,780
Flow Control	$143	$143	$143	$143	$143
Regulator (Pressure)	$1,286	$1,286	$1,286	$1,286	$1,286
Total System Valves	**$31,159**	**$27,559**	**$27,439**	**$27,199**	**$26,569**

	Years				
Control Valves	**2023**	**2024**	**2025**	**2026**	**2027**
Ball Valve (DKR)	$7,248	$7,248	$7,248	$7,248	$7,248
Gate Valve	$2,700	$2,700	$2,700	$2,640	$2,544
Gate Valve (12" +)	$47,604	$47,196	$47,088	$46,560	$46,128
Butterfly Valve	$3,721	$3,721	$3,721	$3,721	$3,721
4" Wharf head Hydrant Valve	$0	$0	$0	$0	$0
6" Hydrant Valve	$0	$0	$0	$0	$0
Total Control Valves	**$61,273**	**$60,865**	**$60,757**	**$60,169**	**$59,641**

Water Storage

Storage	Asset Class	Max Capacity (MG)	Install Date	Design Life (Year)	Remaining Life (Year)	Total Value ($)	Remaining Value ($)
Raw Water Tank	Steel Tank	0.5	1997	75	50	$1,250,000	$833,333
A Tank	Steel Tank	1.0	1967	75	20	$2,500,000	$666,667
Reservoir B (damaged)	Earthen Embankment	3.0	1984	60	22	$6,000,000	$0
C Tank	Steel Tank	2.0	1967	75	20	$5,000,000	$1,333,333
D Tank	Steel Tank	2.0	1967	75	20	$5,000,000	$1,333,333
E Tank	Steel Tank	1.5	1967	75	20	$3,750,000	$1,000,000
					Total	**$23,500,000**	**$5,166,667**

Notes:

1. Reservoir B is assumed to have no value because the cover and liner are damaged

Depreciation

		Years				
Storage	**Depreciation Per Year**	**2023**	**2024**	**2025**	**2026**	**2027**
Raw Water Tank	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
A Tank	$125,000	$125,000	$125,000	$125,000	$125,000	$125,000
Reservoir B	$0	$0	$0	$0	$0	$0
C Tank	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
D Tank	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
E Tank	$187,500	$187,500	$187,500	$187,500	$187,500	$187,500

Services and Backflow Preventers

Service	Year Installed	Life Span	Remaining Life	Number	Total Value ($)	Remaining Value ($)
Service Lateral with Meter	2000	35	13	1,500	$4,500,000	$1,671,429
Service Lateral with Meter	2021	30	29	3,000	$15,000,000	$14,500,000
Back Flow Preventer	2021	25	24	4,300	$4,300,000	$4,128,000
				Total	**$23,800,000**	**$20,299,429**

Depreciation

		Years				
Service	**Depreciation Per Year**	**2023**	**2024**	**2025**	**2026**	**2027**
Service Lateral with Meter	$128,571	$128,571	$128,571	$128,571	$128,571	$128,571
Service Lateral with Meter	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
Back Flow Preventer	$172,000	$172,000	$172,000	$172,000	$172,000	$172,000

Pump Station

Facility	Capacity	Unit	Installed	Life Span	Number	Total Value	Remaining Value
Raw Water Pump Station Building	1,344	SF	1997	50	1	$806,400	$403,200
Raw Water Pump Station Pumps	60	HP	1997	25	2	$120,000	$0
Raw Water Pump Station Pumps	100	HP	1997	25	3	$300,000	$0
Tesla Backup Power at PS 2			2021	20	1	$512,000	$486,400
Pump Station 2 Engine Pump and Piping (Cummins)			1986	25	1	$28,855	$0
Pump Station 2 Electric Pump and Piping			1986	25	1	$48,925	$0
Pump Station 2 Building	524	SF	1968	50	1	$314,400	$0
					Total	**$2,131,000**	**$889,600**

Notes:
1. Pump Station 2 cost from PID financial data.

Depreciation

		Years				
Facility	Depreciation Per Year	2023	2024	2025	2026	2027
Raw Water Pump Station Building	$16,128	$16,128	$16,128	$16,128	$16,128	$16,128
Raw Water Pump Station Pumps	$4,800	$0	$0	$0	$0	$0
Raw Water Pump Station Pumps	$12,000	$0	$0	$0	$0	$0
Tesla Backup Power at PS 2	$25,600	$25,600	$25,600	$25,600	$25,600	$25,600
Pump Station 2 Engine Pump and Piping (Cummins)	$1,154	$0	$0	$0	$0	$0
Pump Station 2 Electric Pump and Piping	$1,957	$0	$0	$0	$0	$0
Pump Station 2 Building	$6,288	$0	$0	$0	$0	$0

Vehicles and Equipment Replacement Projection

Equipment and Vehicle Replacement Costs				
2023	**2024**	**2025**	**2026**	**2027**
$2,983,374	$0	$4,176	$49,672	$36,832

Depreciation

Years				
2023	**2024**	**2025**	**2026**	**2027**
$74,256	$74,214	$68,444	$64,166	$56,146

Note:

1. For a list of the fully depreciated equipment and vehicles, see the "Vehicles + Equipment Data" spreadsheet tab. Column BF, Status, may be filtered to select "Needs Replacement". Alternatively, filter for the desired replacement year in Column BF

Focused Vehicles and Equipment Replacement Table

Description	Year Acquired	Original Cost	Status	Remaining Value	2023 Replacement Costs
Jackhammer Compressor ETC	1992	$10,062.00	Needs Replacement	$0.00	$24,000
Roller Hydrostatic	1995	$11,715.00	Needs Replacement	$0.00	$26,000
Jack Hammer	1998	$1,003.00	Needs Replacement	$0.00	$2,000
Plate Wacker 1000#	1998	$8,312.00	Needs Replacement	$0.00	$17,000
#15 1994 Atlas-Copco Air Compressor	1998	$6,971.00	Needs Replacement	$0.00	$14,000
#34 Atlas Copco 185 CFM Compressor #HOL600889	2000	$8,998.00	Needs Replacement	$0.00	$17,000
Multiquip #304 6.7hp diesel reversible compactor SS#M1522	2004	$7,936.14	Needs Replacement	$0.00	$14,000
United rental (2) BS-2 wacker rammers, plate, pumps	2005	$9,754.00	Needs Replacement	$0.00	$16,000
Power Mole PD-2 w/ hydraulic pump, Advanced Underground	2005	$14,460.00	Needs Replacement	$0.00	$24,000
Multi Quip Rammer compactor Model 903659/MT65HA	2006	$2,777.00	Needs Replacement	$0.00	$4,000
Multi Quip Rammer compactor Model 892630/MT84FA	2006	$2,777.00	Needs Replacement	$0.00	$4,000
Hyraulic Power Unit	2007	$5,362.50	Needs Replacement	$0.00	$8,000
Air Compressor	2009	$12,608.64	Needs Replacement	$0.00	$19,000
Air Compressor	2010	$13,693.13	Needs Replacement	$0.00	$20,000
Air Compressor	2010	$13,694.12	Needs Replacement	$0.00	$20,000
Broom for Skid Steer	2010	$4,732.75	Needs Replacement	$0.00	$7,000
Shoring Box	2010	$7,114.19	Needs Replacement	$0.00	$10,000
Pneumatic Piercing/Boring Tool	2000	$5,722.00	Needs Replacement	$0.00	$11,000
Ditch Witch Vacuum Excavator ID#2Y0388	2004	$49,871.00	Needs Replacement	$0.00	$85,000
Pavement excavating equipment	2004	$6,953.00	Needs Replacement	$0.00	$12,000
Concrete Saw - Target Pro III	2004	$10,907.00	Needs Replacement	$0.00	$19,000
#16 1995 Ford F250 3/4 ton 4X4 ID#2FTHF26H6SCA18542	1995	$22,411.00	Needs Replacement	$0.00	$50,000
#36 1995 GMC Diesel Dump Truck ID#1GDM7H1J5SJ501378	1994	$29,958.00	Needs Replacement	$0.00	$69,000
#50 1991 Ford Ranger Truck ID#1FTCR10U0MUE51794	1991	$14,798.00	Needs Replacement	$0.00	$37,000
#31 1991 Ford Ranger Truck - VIN#1FTCR10U8MTA46594	1991	$8,692.00	Needs Replacement	$0.00	$22,000
#11 1992 GMC C3500 1-ton ID#1GDHC34K8NE542086	1992	$12,696.00	Needs Replacement	$0.00	$31,000
#8 1995 GMC 1500 1/2-ton Truck ID#1GTEK14H6SZ571075	1995	$15,988.00	Needs Replacement	$0.00	$36,000
#6 1995 GMC 1500 1/2-ton Truck ID#1GTEK14H8SZ570378	1995	$15,988.00	Needs Replacement	$0.00	$36,000

Description	Year Acquired	Original Cost	Status	Remaining Value	2023 Replacement Costs
#19 GMC Dump Truck & Body ID#1GDM7D1E3KV514246	1989	$28,457.00	Needs Replacement	$0.00	$75,000
#30 1990 Chev K1500 Pick up- ID#1GCEK14H2LZ256985	1990	$12,373.00	Needs Replacement	$0.00	$32,000
#5 1996 Dodge Ram 2500 4x4 Flatbed ID#1B6KF26Z3TJ184815	1996	$16,941.00	Needs Replacement	$0.00	$37,000
#21 1999 Dodge Ram 1500 P/U ID#1B7HF16Y7XS283211	1999	$18,017.00	Needs Replacement	$0.00	$36,000
#26 1992 GMC C3500 1-ton ID#1GDHC34K1NE542155	1992	$12,697.00	Needs Replacement	$0.00	$31,000
#17 1983 Ford Dump Truck ID#1FDWN70K9DVA23531	2000	$1,000.00	Needs Replacement	$0.00	$2,000
#XX International ID#800ASB485802F5	2000	$1,000.00	Needs Replacement	$0.00	$2,000
#51 1974 Dodge 3/4 Ton ID#W21BF2S574255	2000	$1,000.00	Needs Replacement	$0.00	$2,000
#12 1978 David & Case Trencher ID#1139882	2000	$2,000.00	Needs Replacement	$0.00	$4,000
#13 1970 Hyster Fork Lift ID#D6D1706P	2000	$500.00	Needs Replacement	$0.00	$1,000
#52 2001 Ford F550 Diesel ID#1FDAF56F71EC41467	2001	$28,410.00	Needs Replacement	$0.00	$53,000
#17 Utility Boom Truck ID#R72694000 remodel see above	2001	$7,345.00	Needs Replacement	$0.00	$14,000
#35 Komatsu front loader WA250-1 ID#12254	2001	$44,940.00	Needs Replacement	$0.00	$84,000
#10 2002 Dodge Dakota 4 WD ID#1B7GG12X72S626582	2002	$16,745.00	Needs Replacement	$0.00	$30,000
#4 2003 Jeep Wrangler rt hd 4WD VIN#1J4F4495583P348859	2003	$21,445.00	Needs Replacement	$0.00	$38,000
#2 2004 GMC Sierra 1500 pickup VIN#1GTEK14T44Z248828	2004	$16,535.88	Needs Replacement	$0.00	$28,000
#42 2005 F-350 4X4 pickup VIN#1FTWF31Y36EA47419	2005	$21,406.00	Needs Replacement	$0.00	$35,000
# 1999 GMC #C6500 Water truck VIN#1GDJ7H1C3XJ503920	2006	$28,000.00	Needs Replacement	$0.00	$45,000
# 2006 CAT Roller, model CB-214E, VIN#Z1401044	2006	$32,251.00	Needs Replacement	$0.00	$52,000
# Utility Trailer-Vibrator Aerial Triple-L VIN5DYAA17287C002712	2006	$9,323.00	Needs Replacement	$0.00	$15,000
# Utility Trailer-Boring Aerial Triple-L VIN5DYAA15137C002854	2006	$6,663.00	Needs Replacement	$0.00	$11,000
# 2007 Chevy Silverado w/ serv body, VIN1GBJK34G27E153908	2006	$27,427.00	Needs Replacement	$0.00	$44,000
2007 Ford F-150 Supercab, VIN1FTRX14W37NA71021	2007	$19,090.40	Needs Replacement	$0.00	$30,000
2008 Ford F-150 Supercab, VIN1FTRX14W17FB36734	2007	$19,090.40	Needs Replacement	$0.00	$30,000
Meter Reading Vehicle	2008	$23,889.04	Needs Replacement	$0.00	$36,000
2008 Chevy Truck	2008	$20,984.49	Needs Replacement	$0.00	$32,000
Haulmark Trailer	2009	$4,763.95	Needs Replacement	$0.00	$7,000
2009 F-650 Dump Truck	2009	$63,317.22	Needs Replacement	$0.00	$93,000
2010 International	2009	$74,120.20	Needs Replacement	$0.00	$109,000
2009 Chevy Silverado 1500 - 1GCEK19C79Z243252	2010	$21,157.20	Needs Replacement	$0.00	$30,000

Description	Year Acquired	Original Cost	Status	Remaining Value	2023 Replacement Costs
2010 International Dump Truck	2010	$73,872.01	Needs Replacement	$0.00	$105,000
2010 Ford F-150 4x4 - 1FTEX1EW3AKE01455	2010	$22,026.24	Needs Replacement	$0.00	$31,000
2011 Ford F450 - 1FDUF4HY2BEA13240	2010	$43,002.81	Needs Replacement	$0.00	$61,000
2011 Ford F250 - 1FDBF2B60BEA13238	2010	$29,304.60	Needs Replacement	$0.00	$42,000
2011 Ford F-150	2012	$26,274.00	Needs Replacement	$0.00	$35,000
2006 Komatsu Forklift	2013	$12,160.22	Needs Replacement	$0.00	$16,000

Notes:

1. Focused list defined by PID staff for Critical Assets with upcoming replacement.
2. Each Replacement Cost was rounded to the nearest thousand dollars.

Total Value
$1,143,483.12

Total Remaining Value	Total 2023 Replacement Costs
$0.00	$1,982,000

19 MGD Water Treatment Plant

Facility	Year Installed	Life Span	Remaining Life	Capacity	Units	Number	Unit Cost	Total Value	Remaining Value
Adsorption Clarifiers	1995	35	8	439	SF	3	$1,000	$1,317,000	$301,029
Filters	1995	35	8	439	SF	6	$1,000	$2,634,000	$602,057
Treated Water Storage Tank (concrete)	1995	35	8	662,000	gallons	1	$4.50	$2,979,000	$680,914
Wash Water Equalization Tank (steel)	1995	35	8	188,000	gallons	1	$2.50	$470,000	$107,429
Rapid Mix Pumps	1995	35	8	1	each	2	$1,000	$2,000	$457
Backwash Supply Pumps	1995	35	8	100	HP	2	$1,000	$200,000	$45,714
Surface Wash Pumps	1995	35	8	30	HP	2	$1,000	$60,000	$13,714
Wash water Pumps	1995	35	8	30	HP	3	$1,000	$90,000	$20,571
Plant Water Pumps	1995	35	8	5	HP	3	$1,000	$15,000	$3,429
Instrument Air Compressors	1995	35	8	15	HP	2	$1,000	$30,000	$6,857
Blowers	1995	35	8	75	HP	2	$1,000	$150,000	$34,286
Chlorine Feed-Pre Pump	2005	35	18	1	LS	1	$7,500	$7,500	$3,857
Chlorine Feed-Post Pump	2005	35	18	1	LS	1	$7,500	$7,500	$3,857
Alum Feed Pump	1995	35	8	1	LS	1	$7,500	$7,500	$1,714
Cationic Polymer Feed Pump	1995	35	8	1	LS	1	$7,500	$7,500	$1,714
Nonionic Polymer Feed Pump	1995	35	8	1	LS	1	$7,500	$7,500	$1,714
Caustic Soda Feed Pump	1995	35	8	1	LS	1	$7,500	$7,500	$1,714
Zinc Orthophosphate System	2005	35	18	1	LS	1	$7,500	$7,500	$3,857
Chemical Storage Tanks	1995	15	0	1	each	6	$10,000	$60,000	$0
Valves and Site Piping	1995	50	23	1	LS	1	$500,000	$500,000	$230,000
Flow Meters	1995	30	3	1	each	4	$20,000	$80,000	$8,000
Solids Lagoon	1995	35	8	1	LS	2	$20,000	$40,000	$9,143
Operations and Filter Building (two floors)	1995	75	48	17,544	SF	1	$600	$10,526,400	$6,736,896
Chlorine and Storage Building	1995	50	23	1408	SF	1	$350	$492,800	$226,688
Pump Station Building	1995	50	23	2800	SF	1	$350	$980,000	$450,800
Electrical and Instrumentation	1995	40	13	1	LS	1	$2,000,000	$2,000,000	$650,000
Chain Link Fence, 3 Strand Barbed Wire	1986	40	4	2,850	LF	1	$45	$128,250	$12,825
Site Paving	1995	30	3	49,000	SF	1	$15	$735,000	$73,500
Concrete Retaining Walls	1995	75	48	472,380	SF	1	$2	$944,760	$604,646
Septic System with Lift Station	1995	50	23	1	LS	1	$45,000	$45,000	$20,700
Decorative Rock and Weed Barrier	2021	50	49	1	LS	1	$35,000	$35,000	$34,300
Two 10 x 12 Metal Sheds	1995	30	3	1	LS	1	$17,000	$17,000	$1,700
Tesla Backup Power System	2021	20	19	1	LS	1	$1,500,000	$1,500,000	$1,425,000
Generator, Building, Convault Tank	1995	20	0	1	LS	1	$250,000	$250,000	$0
							Total	**$26,334,000**	**$12,319,000**

Notes:

1. Included elsewhere are air compressor, air conditioning, poly tank, diversion structure screens, and septic system.

19 MGD Water Treatment Plant Depreciation

		Years				
Facility	**Depreciation Per Year**	**2023**	**2024**	**2025**	**2026**	**2027**
Adsorption Clarifiers	$37,629	$37,629	$37,629	$37,629	$37,629	$37,629
Filters	$75,257	$75,257	$75,257	$75,257	$75,257	$75,257
Treated Water Storage Tank (concrete)	$85,114	$85,114	$85,114	$85,114	$85,114	$85,114
Wash Water Equalization Tank (steel)	$13,429	$13,429	$13,429	$13,429	$13,429	$13,429
Rapid Mix Pumps	$57	$57	$57	$57	$57	$57
Backwash Supply Pumps	$5,714	$5,714	$5,714	$5,714	$5,714	$5,714
Surface Wash Pumps	$1,714	$1,714	$1,714	$1,714	$1,714	$1,714
Wash water Pumps	$2,571	$2,571	$2,571	$2,571	$2,571	$2,571
Plant Water Pumps	$429	$429	$429	$429	$429	$429
Instrument Air Compressors	$857	$857	$857	$857	$857	$857
Blowers	$4,286	$4,286	$4,286	$4,286	$4,286	$4,286
Chlorine Feed-Pre Pump	$214	$214	$214	$214	$214	$214
Chlorine Feed-Post Pump	$214	$214	$214	$214	$214	$214
Alum Feed Pump	$214	$214	$214	$214	$214	$214
Cationic Polymer Feed Pump	$214	$214	$214	$214	$214	$214
Nonionic Polymer Feed Pump	$214	$214	$214	$214	$214	$214
Caustic Soda Feed Pump	$214	$214	$214	$214	$214	$214
Zinc Orthophosphate System	$214	$214	$214	$214	$214	$214
Chemical Storage Tanks	$4,000	$0	$0	$0	$0	$0
Valves and Site Piping	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Flow Meters	$2,667	$2,667	$2,667	$2,667	$0	$0
Solids Lagoon	$1,143	$1,143	$1,143	$1,143	$1,143	$1,143
Operations and Filter Building (two floors)	$140,352	$140,352	$140,352	$140,352	$140,352	$140,352
Chlorine and Storage Building	$9,856	$9,856	$9,856	$9,856	$9,856	$9,856
Pump Station Building	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600
Electrical and Instrumentation	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Chain Link Fence, 3 Strand Barbed Wire	$3,206	$3,206	$3,206	$3,206	$3,206	$0
Site Paving	$24,500	$24,500	$24,500	$24,500	$0	$0
Concrete Retaining Walls	$12,597	$12,597	$12,597	$12,597	$12,597	$12,597
Septic System with Lift Station	$900	$900	$900	$900	$900	$900
Decorative Rock and Weed Barrier	$700	$700	$700	$700	$700	$700
Two 10 x 12 Metal Sheds	$567	$567	$567	$567	$0	$0
Tesla Backup Power System	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000
Generator, Building, Convault Tank	$12,500	$0	$0	$0	$0	$0
Total	**$596,144**	**$579,644**	**$579,644**	**$579,644**	**$551,911**	**$548,705**

Planned Improvement Projects (not including maintenance or studies)

Project Number	Project Name	Description	Approx. Cost ($M)	Annual O&M Percentage	O&M cost
1	Zone A Pump Station and Pipeline Project	Pump station at the WTP to direct feed Zone A through a new Zone A Transmission Main. Provides redundant feed to the entire distribution system (currently the system relies entirely on the 42" Transmission Main, a potential single point of failure that could interrupt water supply completely if it was not functional.	$4.58	5%	$229,000
2	Pump Station 2 Upgrade Project	Upgrade of piping and valves at Pump Station 2 to allow back feed of lower zones from A Zone.	$0.40	5%	$20,000
3	WTP Generator Replacement and Switchgear Upgrade Project	Replacement of stand-by generator and associated switchgear	$1.00	5%	$50,000
4	42" Raw Water Pipeline Replacement Project	Replace above grade 42" Creek Crossing with buried alignment. Existing creek crossing is a seismic concern.	$0.38	5%	$18,750
5	Sodium Hypochlorite Storage and Feed System Upgrade Project	New hypochlorite storage and feed system coordinated with other chemicals	$0.80	5%	$40,000
6	WTP Solar Project	Charge battery system, offset summer power usage	$0.50	5%	$25,000
7	36" Raw Water Line Project	Approximately 14,000 feet of raw water line directly connecting Paradise Lake to the WTP to improve reliability of raw water supply system	$12.00	5%	$600,000
8	Reservoir A Tank 2 Project	Addition of a second steel reservoir adjacent to the existing Reservoir A. Existing Reservoir A is 1-MG and is the only Reservoir which gravity feeds A Zone for fire protection and water supply. A second tank will add reliability and provide additional needed fire storage for A-Zone. In conjunction with the Pump Station 2 Upgrade Project, this reservoir would also serve all lower zones.	$4.00	5%	$200,000
9	Backwash Equalization Tank Project	Add second Backwash Equalization Tank at WTP and replace existing Backwash Equalization Tank. Existing Backwash EQ tank is corroded and approaching failure. Because there is only one tank, it has not been possible to take it out of service for recoating/maintenance. A second tank will allow for long-term maintenance.	$3.00	5%	$150,000
10	Backwash Recycled System Project	Add backwash recycle pump and control system to reduce the amount of backwash waste and capture more of the raw water as treated water. Requires a retaining wall to make a flat area	$1.30	5%	$65,000
11	Corporation Yard and Office Solar Project	Add solar to the corporation yard and office area. Provide covered parking, offset summer power usage.	$1.00	5%	$50,000
12	Original WTP Demolition	Demolish original plant clarifier and retrofit old ops building	$0.50	0%	$0
13	Supply Storage	Provide covered storage of fittings, pipe, and equipment.	$0.50	5%	$25,000
14	Corp Yard Paving	Add pavement to the area at the corporation yard to replace the current gravel	$0.50	5%	$25,000
15	Storage Tank Upgrades	Tanks C, D & E lead abatement from exterior coating, internal and exterior coating of tanks. Cathodic Protection system for A tank and Raw Water tank	$0.75	5%	$37,500
16	Plant SCADA & Instrumentation Upgrades	Replacement of plant SCADA PCs & Instrumentation upgrades at the WTP	$0.60	5%	$30,000
17	Cathodic Protection System evaluation	Evaluation of the out of service cathodic protection system (CPS) at the treatment plant, and the CPS for the 2.5 mile 42-inch transmission pipeline to town.	$0.30	5%	$15,000
18	Treatment Plant Pavement Rehabilitation	Rehabilitate the paving at the Treatment Plant	$0.25	5%	$12,250
19	Gabion Wall	Construction of a gabion wall to reinforce the Magalia Dam northern spillway wall	$0.20	5%	$10,000
20	Community Power Resiliency Allocation	Support energy resilience for critical facilities during power outages. Development of procurement documents underway for contracted services to install solar equipment at PID tank sites.	$0.27	5%	$13,460
21	All Terrain Telehandler	Acquire a telehandler	$0.05	5%	$2,500

Planned Improvement Projects (not including maintenance or studies)

Project Number	Project Name	Description	Approx. Cost ($M)	Annual O&M Percentage	O&M cost
22	Lake Level Monitor - Paradise Lake	Add a lake level monitor for Paradise Lake	$0.05	5%	$2,500
23	Ball Valve Replacement - Paradise Lake	Replace Paradise Lake ball valve	$0.25	5%	$12,500
24	Bleach Tank Relocation	Relocate tanks	$0.60	5%	$30,000
		Total	**$33,769,200**		**$1,663,460**

Notes:

1. Projects not included because they are considered maintenance or planning reports: clarifier media, EQ tank PDR

Comment Log				
No.	**Date**	**From**	**Question/ Action item**	**WWE Response**
1	12.24.21	PID	Add Land as a PID asset from the PID provided Asset List	Added
2	12.24.21	PID	Addition of replacement dates and costs for both equipment and vehicles.	Included replacement costs as a 5 year look ahead on Vehicles + Equipment Sheet
3	12.24.21	PID	Revision on PID asset list: "Correct Pump Station 22" to "Pump Station 2"	Changed
4	12.24.21	PID	Add depreciation values for all PID assets	Added
5	12.24.21	PID	Add parcels and improvements for parcels 053-150-198-000 and 053-150-199-00 adjacent to PID corpyard	Added
6	01.06.21	PID	Add an additional select group of vehicles and equipment to the memo as well as a note that these are just a portion of the vehicles and equipment so that no one thinks it is inclusive. Also please add the overall data that you had on the other sheet for vehicles and equipment that incorporated the total cost of all equipment	Included a vehicles and Equipment Replacement table on memo and in PID_Asset Excel file with the selected vehicles and equipment, and included a note in the Memo. New tables were included in the memo that summarized the overall replacement cost projection and depreciation for vehicles and equipment