
STAFF REPORT

Water Master Plan

Requested Action:

Accept the proposed Amador Water Agency Water Master Plan.

Background:

The study to develop the proposed Master Plan started in September 2019. Keller Associates was engaged for the task, and has worked closely with Operations and Engineering staff. The Planning Operations Engineering Committee discussed several aspects of the draft plan in November 2020, and the Board conducted workshops on the draft plan on December 17, 2020, and January 21, 2020.

The information attached here includes a red-lined version of the plan reflecting all changes made to the text of the body of the draft (Chapters 1 – 8) as originally posted for the December 17, 2020, workshop. An additional file is posted that is the entire draft plan, including appendices, in clean form. To facilitate review, this staff report includes a list of all the changes. This includes the changes that were identified in the agenda packet for the second workshop, so this list is comprehensive.

Discussion:

The Board discussed many questions and issues in its workshop meetings. At this time, staff is confident in the quality of the proposed plan, and believes the changes listed in this report address comments that were raised. The Board discussed extensively the prioritization of projects that the plan identifies.

One particular issue that was raised was that the presentation at the first workshop may have caused confusion about the **populations** that the plan represented as being served by specific systems. The confusion was thought to arise from calculating population from the number of connections, but confusing wholesale connections with retail connections. The draft plan explains how the “population served” statistic was defined to include only **retail residential connections**, and therefore excluded wholesale customer populations. But where this statistic was used, in Section 1 of the plan, it was not intended to reflect the entire served population, but rather was part of

the calculation to determine per capita consumption factors for use as planning criteria. The approach is now further explained in a second paragraph in Section 1.4.1, and a table showing wholesale customers' retail residential connections has been added for information. The approach used allows AWA to derive planning criteria based on per capita water use, even though we do not have retail meter data from our wholesale customers.

Since the second workshop, staff received a memorandum from Director Farrington articulating a number of questions and comments, most of which were discussed by the Board in the workshops, but several of which reiterated requests for specific information not included in the draft plan.

For the benefit of the entire board, I am providing Director Farrington's memorandum and my response to it as attachments to this staff report, so that everyone gets the same input.

While the list of changes is fairly extensive, the vast majority of these changes were either identified in the agenda packet for the second workshop or were specifically discussed in the workshop meetings. The list of changes to the December draft includes:

1. Global Changes
 - a. References to "future growth" have been updated to read "planned growth".
 - b. References to "planning" for growth have been updated to read "preparing" for growth.
 - c. References to improvements being "slated" have been updated to read "recommended".
 - d. Table, chapter and section references were updated. Planning criteria references were added. Spelling errors were corrected.
 - e. Clarification was added regarding "the unknowns of obtaining water rights" to transfer water from water bodies and sources not currently permitted or owned by the Agency.
2. Chapter 1
 - a. Section 1.4 – Paragraph 2 was added, which reads, "For the AWS-Tanner and CAWP systems which serve wholesale customers, a "wholesale" component of the existing system demand is provided in this section in gallons per capita per day (gpcd). This value is calculated based on the total system demand divided by the Agency's service area population (does not include the population of the wholesale customers), multiplied by the percentage of the wholesale demand compared to the total demand. The size of each wholesale customer, in terms of connections, is provided in Table 1- 4. For the AWS-lone system, a similar method was used to provide a demand component for the Mule Creek Correctional Facility."

- b. Table 1-4: Wholesale Customer Connections was added listing the residential and commercial connections for each of the Agency's five wholesale customers.
 - c. Section 1.4, AWS-Tanner – Clarification was added that the Tanner system's residential connections listed (1,492 in 2019) are the Agency's retail residential connections. This data was compared with Agency monthly metered data to determine the gallons per capita day (GPCD) for Agency residential retail customers, as shown in Table 1-5.
 - d. Section 1.4, AWS-Tanner – A clarification statement was added at the end of the first paragraph. "The wholesale component of this system's demand is much larger than the other components as the wholesale users served by the Tanner system are large. The wholesale component is calculated based on the population within the Agency's service area. GPCD values shown are for the Agency's retail residential connections only."
 - e. Section 1.4, AWS-lone – A clarification statement was added at the end of the last paragraph explaining that a more accurate persons per household value was used for the city of lone, as more accurate data was available. For the City of lone, 1.97 persons per household, was used per DOF population information for the city, as opposed to the 2.3 persons per household DOF provided for the balance of the county. The clarifying statement reads, "This system only serves one city as opposed to serving multiple cities, unincorporated county, or wholesale users like the other Agency systems. Thus, a more detailed estimate of the average household size was calculated for this system (see footnote 3 of Table 1-8) by using the DOF population of lone (less the incarcerated population) divided by the number of residential service connections. Planned growth was assumed to be 2.3 people per household consistent with the other Agency systems."
3. Chapter 2
- a. Section 2.2, Supply -- For the Camanche system, paragraph 6 was added, which reads, "It should also be noted that the wells in this system experience positive bacteria test results when they are operated at higher flow rates. These bacteria hits have occurred for both wells in the Front System, and wells in the Back system. Historically, when the wells were operated at higher flow rates in summer months, bacteria hits were a monthly occurrence. More recently, bacteria hits have occurred at a lesser frequency (i.e., once-a-year) by reducing the wells' flow rates. Currently the wells are operated at lower flow rates of 150 gpm (Well 6), 170 gpm (Well 9), 105 gpm (Well 12), and 170 gpm (Well 14) to reduce the risk of bacteria hits. The lower operating flow rates suggest that there is an existing supply deficit of 10 gpm, and a 2040 deficit of 655 gpm.
 - b. Figure 2-3 was updated (one pressure zone was not labeled, they are all labeled now)

- c. Section 2.4, AWS-Tanner – Reference to the approximate number of pressure zones was replaced with the actual number of pressure zones served. This system is comprised of 12 pressure zones.
 - d. Section 2.4, CAWP – Reference to the approximate number of pressure zones was replaced with the actual number of pressure zones served. This system comprises 46 pressure zones.
 - e. Section 2.8 – Clarifying sentence added to paragraph 2. “Several components are identified in the CIP to be replaced and/or abandoned as discussed in Chapter 8. These components were not included when estimating the annual replacement budget.”
 - f. Section 2.8, Pipeline Replacements – Clarifying sentence added to paragraph 2. “The pipes identified in the CIP projects were not included in total pipe lengths used to calculate the annual pipeline replacement budget.”
4. Chapter 4
 - a. Figures 4-5 to 4-12 (8 figures total) have been updated to have labels for the peak hour pressures or available fire flow.
 5. Chapter 7
 - a. Clarifying statements were added to the introduction regarding cost estimates provide by the Agency, which reads, “It should be noted that the capital improvement summary table in Appendix I includes several projects and cost estimates that were previously identified by the Agency. Detailed cost estimates were not included for these projects. In addition, these projects are not discussed in this chapter of the report.”
 6. Chapter 8
 - a. Table 8-2 updated with the revised lone WTP fencing and LAMEL 1A.2 (B & WTP) costs. Revised Replacement Budget totals were also updated throughout the document, where referenced.
 - b. The “Ridgeway Pump Station” was incorrectly referred to as the “Ridge Pump Station” in two locations. References have been updated to read “Ridgeway Pump Station” in Chapter 8, Table 8-2 in Priority 1A project 6 [CAWP A1.1(B)]. This table in Appendix I was also updated.
 - c. Section 8.1, Annual Replacement Budgets – Clarifying statement added, “As discussed in Chapter 2, components identified by the CIP to be replaced or abandoned were not included when estimating the annual replacement budget.”
 7. Appendix D – Conditions Assessment sheet for CAM Pump Station #12: “Brandy” changed to “Brandt” in the Additional Notes section.
 8. Appendix D – Conditions Assessment Sheet for CAM Tank #9 had a sentence in the Additional Notes section that read “Lots of weeds here – it’s a long story that is sensitive to Brant and Staff...but weeds need controlled.”, this has been updated to read “Weeds on site need to be controlled.”.
 9. Appendix D – Conditions Assessment sheet for the CAWP Mt. Crossman Pump Station had a sentence that read “The Mace Meadows Tank #5 is on this site but owned by the Mace Meadows Association, but the AWA owns the land.” This has been updated to read “The Mace Meadows Tank #5 (Forest Knoll Tank) is on

this site but owned by the Mace Meadows Association, but First Mace Meadows owns the land.”

10. Appendix E – The Fire Hydrant Replacement Budget sheet was updated by removing of the table that showed the number of wholesale customers hydrants.
11. Appendix I – The WTP CIP project cost sheets were added for the following projects
 - a. lone 1A.1 (WTP) – lone Clear Well Cover Replacement
 - b. lone 1A.4 (WTP) – lone WTP Fencing
 - c. lone 2A.1 (WTP) – lone Treatment Relocation
 - d. lone 1B.2 (WTP) – lone Treatment Improvements
 - e. lone 3.1 (WTP) – lone Raw Water Tanks
 - f. Tan 1A.3 (WTP) – Tanner Clearwell Replacement
 - g. Tan 2A.1 (WTP) – Tanner Treatment Expansion
 - h. Tan 1B.1 (WTP) – Tanner Treatment Improvements
 - i. Tan 3.1 (WTP) – Tanner Raw Water Tanks
 - j. CAWP 2A.3 (WTP) – Buckhorn Automated CIP Valves
 - k. CAWP F.2 (WTP) – Buckhorn Residuals Dewatering Expansion
 - l. LaMel 1A.2 (WTP) – LaMel Treatment Improvements
12. Appendix I – Cost Sheet for CAWP A1.1(B) updated to read “Ridgeway Pump Station”
13. Appendix I – The WTP CIP project for the lone WTP fence project cost has been updated to be ~\$150,000. This change was made in the following locations:
 - a. Chapter 7, Table 7-3
 - b. Chapter 8, Table 8-2
 - c. Appendix I summary tables and cost sheet
14. Appendix I and Table 8-2 – Foot note 5 was added to indicate projects where Agency identified the project and the cost, and cost sheets were not developed for these projects.
15. Appendix I – The CIP project LAMEL 1A.2 (B & WTP) had a total cost of \$3,448,000. Contingency was being counted twice for the treatment portion of this project. This has been corrected. The total project cost is now \$2,398,000.
16. Appendix J – Updated Connection Commitments PDF staff provided has been added.

CEQA: The recommended action is exempt or not subject to CEQA.

Fiscal Impact: None

Recommendation: Accept the proposed AWA Water Master Plan.

Prepared by: Larry McKenney, General Manager

Attached:

Dir Farrington memo of Jan 22
GM memo of Jan 27

Memo

To: Larry McKenney
From: Rich Farrington
Date: January 27, 2021
Re: AWA Draft Master Plan Comments

1. HEALTH HAZARDS & PRESSURE

During our Dec 17 workshop, I asked about water pressures less than 40 psi and some below 20 psi in the Mt. Crossman Service area. Page 4-6 (and pg 260 which cites 10psi on Mason Ct) says, "some have service pressures of less than 40 psi" (AWA's planning criteria are > 40 psi – pg 1-25). Pressure relates directly to health hazard.

Actual Peak Hr Demand pressures are needed on 2020 CAWP maps like is shown in the Tank D/Riverview service area (pg 4-14) to better evaluate potential health hazards in CAWP. I'd like the following service area maps that show considerable pressures below 40 psi to be changed to show actual psi numbers like pg 4-14: Mt Crossman, Alpine, Tanks A&B, Tank C areas. Reviewers can't make a comparison of the Tank D/Riverview area priority relative to the others without these numbers.

I understand that you will provide these to me before the Jan. 28th Board Meeting. Where actual numbers aren't possible like on pg 4-14, I'd like to have the pressures broken down from 0-20 and 20-40.

2. FIRE FLOWS

The 2019 ISO Fire Rating Rept shows the Mt. Crossman area on Sugar Pine Dr. with a low of 250 gpm fire flow. This is far below the 1,000 gpm goal and the 500 gpm Interim Goal set. I'd like to see the 2020 MDD fire flow numbers like on the Lamel 2020 MDD map (pg 4-26). If not possible, break out flows between 0-250 gpm (instead of 0-500) for the following service area maps: Mt. Crossman, Alpine, Tanks A&B, Tank C, Tank D, Pine Acres, Tanner and Camanche. This is so the reader can better see how close flows are to the 500 gpm Interim goal of AWA to better indicate priority.

3. FIRE HAZARD & STORAGE ANALYSIS

Upcountry Fire Hazard level is the highest in the County based on the Cal Fire Hazard Severity Map because of the risk of catastrophic wildfire in the adjacent forests. Water Storage is critical in the Wildland Inner face zones of CAWP. You stated yesterday that fire protection is another agency's responsibility. I'm sure you're aware of the Yorba Linda Freeway Fire case and huge settlement due to the failure of the infrastructure supporting fire suppression, aren't you? Isn't there a liability issue for system/flow failures?

Loss of 197,000 gal and lack of water Storage in the Mt Crossman/CAWP system Upcountry from past and imminent failures is a critical risk issue that doesn't seem to be acknowledged in the report or with Staff. The 197k gal lost is from CAWP Tank (62kgal) and McKenzie tank (39kgal), that have been shut down, and the Rabb Park (46kgal) and Alpine 1 (50Kgal) tanks that are close to failing, all due to rust. This needs to be made up somewhere and not be lost and forgotten.

The 2020 CAWP STORAGE ANALYSIS (pg 2-21) leaves out Alpine 1, CAWP & McKenzie tanks. Why? Is this just lost? The project cost sheet on pg 516 states the need for the project is the service area doesn't meet the Agency's storage requirements.

4. CAPITAL PROJECT CRITERIA

The Mt Crossman Tank project seems to meet at least 3 priority 1 criteria on pg 8-1 Capital Project Prioritization Criteria:

- *Address imminent failure of asset (based on physical conditions)* (CAWP FAILED; RABB & ALPINE 1 TANKS ARE NEXT)

- *High health and safety risks below 20 psi* (pg 4-6 – STATE WATER CODE ISSUE – NEED ACTUAL PHD NUMBERS AS LISTED ABOVE AND PROMISED YESTERDAY)

- *Correct operational/peaking storage deficiencies* (REPLACES LOST & FAILING STORAGE, INCLUDING FIRST MACE MEADOW WATER ASSOC TANK MM#3 AND ELIMINATES 2 PUMP STATIONS)

Why isn't consolidating multiple tanks into one tank by the Mt Crossman tank project considered Priority 1 for Operational Adjustment to increase pressures & flows, address the past and "Imminent failure of asset" (tanks) and loss of storage, and replace 2 pump stations?

OTHER CONSIDERATIONS –

The statement on pg 240 (line 3) that the land under the Mt. Crossman Pump Station belongs to AWA is incorrect according to Jeff Brown of FMMWA. Delete this statement.

Replacement of the 3 private tanks mentioned on pgs 2-22 & 5-10 belong to First Mace Meadow Water Assoc and should be conditioned on discussion with FMMWA.

The Mt Crossman tank could replace the First Mace Meadow Water Assoc. MM #3 – 44 kgal (Ruggles) Redwood tank that needs replacing within 5 years.

Staff has mentioned concern about funding. The Mt. Crossman serves a Dept Water Resources designated Disadvantaged Community <https://gis.water.ca.gov/app/dacs/>

100% construction funding for Mt. Crossman is potentially available like for the Buckhorn Water Treatment DBP project + 1.5 year ago.

Replacing the Ranch House and Jackson Pines Tanks, priorities 1B (pg 8-2), are lower priority than Crossman because they're in good condition but too big, is not needed other than converting the floating covers to hardtops. These 2 projects should be modified to show replacement of just the tops on the project list (pg 8-2). Replacing with smaller tanks is a long term priority – maybe priority 3 in my view.

Has the cost of replacing Tank D (priority 1A pg 8-2) in a new location been compared to the cost of adding a pump station with a new tank at the current location to increase pressures? If not, there's work to be done here.

If the Mt Crossman tank project can't be added to priority one, then I think it should be switched with tank D: D to 2A and Crossman to 1A. They are both the same cost.

I think the recommendation to abandon Sunset Heights (pg 2-22,23) needs to be conditioned on discussion with Pine Grove CSD.

Has the \$60Mil. connection of Buckhorn to Tanner and the Pardee pipeline been taken out of the Plan (pg 7-2)?

5. POPULATION

Update needed: Keller's Table 1-1, Population Projections, pg. 1-5 – cites footnote #1 CA Dept of Finance E-4 for 2010-2019, having the total county 2019 population as 38,294. DOF updated their population table. DOF table E-4 "City/County Population Estimates (2011-2020 updated 5/1/2020) showing the DOF 2019 pop as 37,820 (-526) and 2020 population count as 37,676 instead of 38,745 from Table 1-1 (1,069 less):

<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-4/2010-20/>

Keller's forecast of 2040 population is about double the County's, AWA's & DOF's – Keller's 2040 forecast for County = 52,311 (Sec 1.2, Pg 1-4 & 5; (+14,635 from DOF's 2020 of 37,676);

The 2016 Amador County Gen Plan FEIS projected Pop. Growth for Am. Co (FEIR Table 4.12-1 pg 4.12- is 44,200 for 2040). The same number was used for the 2015 AWA UWMP – (pg. # 3-1 2040 and Table HE-4 Projected Pop. Growth pg A3)?

Keller's growth rate from 2020 – 2040 is 1.95%. This is more than double the 0.85% county growth rate over 30 years between 1990 – 2020 (calc's at end of doc).

Using the 30 year Amador Co. average growth of 0.85%/yr to project to 2040 gives a population of 44,608 (7,853 less than Keller's 52,311).

Pg 5-7 "**New lone WTPA**" on pg 5-7 you recommend moving the plant, a \$25 mil. (or more) project. At the Dec workshop I asked if it was possible to expand the existing lone WTP by moving facilities like the clarifier to the land by the reservoir. The answer I got was this is why we recommend a study of expanding capacity for the IWTP. Yet the decision seems to be set for a New IWTP. Shouldn't the text be changed to condition this decision on the outcome of a capacity alternatives study? The 2019 Grand Jury hit us for lack of consideration of economics on project planning. The report seems to assume that moving the treatment plant to the reservoir property has been decided. Is there an economic or cost benefit analysis of feasible alternatives to expansion including moving it? I haven't seen one.

The land was bought because it adjoins our reservoir as an opportunity purchase.

Can the lone plant be expanded if more room is made available, at a lower cost and much faster schedule than building a whole new plant? Isn't timing a big factor? There's a need to be creative on alternatives for expansion of the IWTP & TWTP projects.

Growth Rate in Percent between 2020 & 2040 per Keller

$$PR = \frac{(V_{Present} - V_{Past})}{V_{Past}} \times 100$$

PR = Percent Rate

VPresent = Present or Future Value

VPast = Past or Present Value

Master Plan shows +14,635 increase in 20 yrs (by 2040) = **1.95%**

Current Pop = 37,676 (DOF)

Forecast 2040 = 52,311 (Keller)

$$\begin{aligned} PR &= (52,311 - 37,676) / 37,676 \times 100 / 20 \\ &= (14,635/37,676) \times 100 / 20 \\ &= (0.39) \times 100 / 20 \\ &= 35.0 / 20 \\ &= 1.95\% \text{ Growth} \end{aligned}$$

Average Growth from 1990 to 2020

Using the same formula

1990 pop = 30,039

Current Pop = 37,676 (DOF)

$$(37,676 - 30,039)/30,039 \times 100/30 = \mathbf{0.85\%}$$

Forecast of 2040 pop based on 0.85% avg growth from 1990-2020

equation

$$Pop_{Future} = Pop_{Present} \times (1 + i)^n$$

i = Growth Rate (not in %)

n = Number of Years

Future Pop = Present x (1+ 0.0085) raised by Power of 20

Future = 37,676 x 1.184

Future Pop = 44,608 (increase of 6,932 from 37,676)

Keller's Future Pop = 52,311

Difference from Keller = 52,311 - 44,608 = -7,853

To: Board of Directors
From: Larry McKenney GM
Date: Jan 25, 2021
Re: AWA Master Plan Comments

On Friday, 22 January, I received the attached memo of comments from Director Farrington. I want to respond to the entire board regarding his points.

1. Health Hazards & Pressure

The request is to show actual pressures under specified conditions for nodes shown in the figures for Mt Crossman, Alpine, Tanks A&B, and Tank C service areas. This is because Figure 4-13 shows specific pressures in the Tank D and Riverview service areas, but Figures 4-5, 4-7, 4-9, and 4-11 only show the color-coded pressure levels broken into ranges 0-40, 40-45, 45-60, etc., but not specific psi numbers at each node.

The decision to display the graphics differently was based on the readability of the graphics, and on the fact that all prioritization factors considered cumulatively led to prioritizing the Tank D area highly, and so the detail seemed more pertinent to present.

The comment is that the plan should show the same data for each tank system so the reader can better see how close flows are to AWA's pressure goal to better indicate priority. I believe the draft plan demonstrates unequivocally that pressures in much of the CAWP system are less than what AWA would prefer. This is the product of development history and numerous other circumstances.

With regard to Mason Court, which is mentioned as a specific case, a very small number of customers have very low pressure at their meters. This is how the system was designed, and staff believes those customers have individual pumps behind the meters. I am unaware of any of the customers having complained about the situation. While AWA has a goal for a higher pressure, there other circumstances certainly may bear on prioritization.

I have directed staff to work with Keller to try to develop versions of the figures mentioned above to indicate specific psi at each node, and will provide the information to the board as soon as possible, if Keller is willing to provide those model outputs at no additional cost.

2. Fire Flows

The comment is similar to the pressures discussion above, seeking a finer distinction in the displayed fire flows among different systems, this time also seeking to compare the CAWP tank areas to the Tanner and Camanche service areas. Keller has replaced the figures for the CAWP system to show fire flows at each specific node. To show that level of detail for the other systems would require significant additional work by Keller, and I recommend against it. It was my impression from the two workshops that the board understood that fact and weighed it in considering project priorities.

3. Fire Hazard & Storage Analysis

The first question relates to my comments about AWA's responsibility for fire protection, and the possibility of liability. Unless the Agency affirmatively takes on a responsibility for fire protection, it is not our responsibility. This does not diminish the importance of fire protection to the community, nor does it mean that we should not have planning goals for fire flow. Staff's recommendation, however, has been that drinking water regulatory requirements and certain critical system components that are currently failing or that seriously affect overall system capacity are a higher priority for projects, as those are directly the Agency's responsibility. I have discussed liability issues with counsel.

The second question is about storage analysis relative to fire hazard. The comment is that the plan does not acknowledge the importance of lost storage in the CAWP system due to failing tanks, especially given fire risk.

The draft plan describes in detail the condition of the CAWP tanks and recommends projects based on an exhaustive evaluation of alternatives to improve storage and system operation. The current Tanks A&B project was designed to improve storage within the system, both by adding storage volume and allowing for additional served area to be reachable from those tanks. Tanks omitted from Figure 2-17 (i.e. CAWP Tank and McKenzie Tank) are already shut down, and therefore do not show up in the calculation or evaluation of existing storage. There are projects identified in the plan to increase storage in the CAWP system, not just replacing but exceeding the capacity lost from failing tanks, but where the primary driver was fire flow, those projects did not rank as highly in the priorities.

4. Capital Project Criteria

The comment is that the Mt Crossman project meets several priority 1 criteria, yet is ranked in priority 2. This is because there are many criteria, and the overall ranking was based on a cumulative consideration of the criteria. The board discussed the ranking of the Mt Crossman project, considering the three priority 1 factors noted, and did not suggest changing the draft plan's recommendations regarding the priorities. This in no way suggests that the Mt Crossman project is not a valuable and important project, but acknowledges that the Agency currently has many pressing needs.

5. Other Considerations

The comments memo lists a number of points also raised during the workshop discussions and which were addressed in those meetings. One fact that I would add has to do with the Ranch House and Jackson Pines Tanks. The suggestion is that those tanks, though oversized, are in decent condition and could just have hard tops installed to replace the old Hypalon covers at significantly less cost than the replacement project.

Installation of hard covers for those two reservoirs was evaluated in 2019. A serious challenge was that the tanks lacked structural strength to support the covers as designed. Building external additional support for the covers caused the covers to rival the cost of replacing the tanks. In addition, the tanks have other factors driving replacement, including the fact that the bottoms of the tanks are also Hypalon, also 30-years old. The plan also describes a number of other operational challenges created by

these tanks, including access, SCADA control issues, and managing storage levels low enough to allow turnover for water quality.

Another comment in the memo suggests that the plan represents a decision having been made on constructing a new lone WTP at a different location, and that this decision lacks sufficient supporting economic analysis. It is vitally important to note that the acceptance by the Board of the Master Plan makes no project decisions. The Master Plan before the board is the result of a planning study that will be used to recommend the focus of resources going forward, but every project described in the plan will still need individual evaluation, budgeting, and environmental review.

Staff's recommendations at this time reflect the understanding that many of the projects listed in the plan are inevitably distant in time, and that their ultimate evaluation will need to be more detailed and will need to consider the circumstances at that time. This could mean, for example, that less expensive alternatives to moving the lone WTP could be identified by follow on treatment plant studies, and by accepting this plan, the board will have done nothing to prevent acting on that new information. Similarly, if specific grant opportunities arise, staff will certainly bring those to the Board's attention for consideration.