



Posted: October 11, 2019

NOTICE AND CALL OF A MEETING OF THE
TRINIDAD PLANNING COMMISSION

The Trinidad Planning Commission will hold a regularly scheduled monthly meeting on
WEDNESDAY October 16th, 2019, AT 6:00 P.M.
in Town Hall at 409 Trinity Street.

The following items will be discussed:

- I. ROLL CALL
- II. APPROVAL OF MINUTES – August 21, 2019 (*continued from Sept. 18 meeting*)
– September 18, 2019
- III. APPROVAL OF AGENDA
- IV. ITEMS FROM THE FLOOR
- V. AGENDA ITEMS

Discussion / Decision / Public Hearing / Action

1. Rheinschmidt 2019-10: Design Review and Coastal Development Permit to construct a new 36' x 24', 864 Sq. ft., 16' tall, detached garage. A garage was previously approved by the Planning Commission in February 2007, but was never constructed, and the approval has expired; the concrete foundation for the garage was already constructed under the previous approval.
2. General Plan Update: Discussion of water related policies in the Land Use and Circulation Elements.

- VI. COUNCIL REPORT
- VII. STAFF REPORT

VIII. FUTURE AGENDA ITEMS

IX. ADJOURNMENT

The meeting packets can be accessed at the following link:

<http://trinidad.ca.gov/document-library/pc-meeting-packets-2019>

MINUTES OF THE REGULAR MEETING OF THE TRINIDAD PLANNING COMMISSION
WEDNESDAY, AUGUST 21, 2019

I. CALL TO ORDER/ROLL CALL (6:00 pm)

Commissioners Present: Graves, Lake, Johnson, Stockness

Commissioners Absent: Kelly

City Planner Staff: Parker

City Staff: Naffah

II. APPROVAL OF MINUTES

July 17, 2019

Motion (Johnson/Stockness) to approve as submitted. Passed (4-0).

III. APPROVAL OF AGENDA

No formal motion to approve the agenda. Approval made by acclamation.

IV. ITEMS FROM THE FLOOR

There were no items from the floor.

V. AGENDA ITEMS

1. General Plan Update: Discussion of (a) next steps and schedule, (b) Introduction chapter and vision statement (c) water service policies of the Circulation Element, (d) Service Area and Sphere of Influence policies and priorities (Land Use Element).

Staff report

Planner Parker summarized the agenda memo, which included a summary of issues discussed at the joint Planning Commission / City Council meeting on July 31, 2019. Topics included answers to the specific Planning Commissioner questions, public outreach, scheduling, climate change, community change, introduction chapter and vision statement, and water service policies. The emphasis for this meeting will be to review the Introduction chapter and vision statement, and, if time, water policies.

Parker explains that she has updated the Introduction based on current information as well as Coastal Commission comments. In addition, Commissioner Kelly provided an executive summary of the general plan that Parker edited and added to the section regarding the 'current general plan.' Commissioner Kelly also provided an alternative vision statement that included a much more succinct vision along with several "strategic goals" that are intended to be carried through the whole general plan and be used to help interpret policies and other guidance.

Commissioner Questions/Comments

Commissioner Graves suggests holding off on the public comment portion of the hearing until after Commissioner discussion for general plan discussions.

Commissioner Lake requests that Commissioners be given an opportunity ask questions and bring up non-agenda issues at some point during the meeting, such as during "Items from the Floor." She wants to ensure that the general plan update schedule is available to the public. She

suggests having a 1-click location for accessing general plan update documents on the City's home page. All the background documents and draft elements should be in that easily accessible location.

The discussion moves on to the Introduction. There was some confusion regarding the attachment that included Commissioner Kelly's suggested vision statement, because some of the text was cut off. Planner Parker explained that the material that had been cut off was the executive summary, which had already been incorporated into the text of the Introduction.

Commissioner Lake points out that General Plan 2010 should now be 2020. She also notes that acronyms are used and written out inconsistently throughout the document. Parker suggests that each element have its own list of acronyms for ease of use, and that she will ensure that they are written out only the first time they are used and used consistently.

Commissioner Johnson wants to ensure that all the background documents listed on page 6 are made available on the City's website. He also clarifies whether all the Coastal Commission staff comments have been addressed. Parker confirms that is the case for the Introduction.

Parker brings the Commission's attention to a highlight on page 6 where the Coastal Commission staff recommended that overlapping / cross-referenced policies just be listed rather than written out multiple times, noting that the Planning Commission made a conscious decision to write them out in each section they apply in the current draft for ease of use by the public. Commissioner Lake's preference is to just follow the Coastal Commission recommendations, even if they are not mandatory. The other Commissioners generally agree with that, but in this case, prefer the policies to be written out each time.

The Commission discusses the new "Plan Highlights" section and several edits are made for clarification.

The Commission then discusses the Vision Statement. There is a general consensus that Commissioner Kelly's version is preferred. Some changes to the wording and order of the strategic goals are discussed.

Public Comment

S. Laos (Trinidad Rancheria) refers to staff's suggestions that a flyer be mailed to City residents regarding the general plan update to encourage participation. She suggests that the mailing include a broader area, since City decisions affect areas outside the City, and people outside the City are also part of the community. She also expresses her preference for Kelly's version of the Vision Statement.

D. Cox (Trinidad Resident) comments that the public notices/agendas should specifically state what part of the general plan will be discussed at each meeting, so the public can be prepared.

E. Weinreb (Greater Trinidad Resident) suggests providing a link to the packet materials, because they can be hard to find.

Commissioner Discussion

Planner Parker suggests that she can add a link to the packet on the agenda. Commissioner Lake would also like to see a general plan update schedule posted around town. Parker warns that the

schedule often changes, so that could cause confusion; it would have to be a short-term schedule and clearly state that it is subject to change.

Motion (Johnson/Lake) to accept Commissioner Kelly's Vision statement as amended.

Motion (Lake/Johnson) to pass the Introduction chapter, as amended, on to the City Council for review. Motion passed unanimously (4-0).

Commissioner Discussion

The Commission requests that staff include the amended Introduction in the next Planning Commission packet.

The Commission moves on to discuss water service policies. Planner Parker explains that water policies are included in two different elements. The Land Use Element includes policies related to the City's service area, and the Circulation Element includes policies related to the water plant/system and water service in general.

Commissioner Lake is strongly in support of keeping the City's water right on Mill Creek and having Mill Creek designated as a Critical Water Supply by the County.

Commissioner Johnson suggests that the Planning Commission should put off further discussion of water policies until some of the pending GHD reports, including one on Luffenholtz Creek flows and one on alternative water sources, are available. Commissioner Graves opines that the City needs a Plan B. Commissioner Stockness agrees, stating that hooking up to HBMWD should be explored. Commissioner Lake states her strong opposition to HBMWD water for the City. Stockness clarifies that she meant a hook-up for users outside City limits.

A discussion ensues regarding an upcoming presentation by County Supervisor and Greater Trinidad Area resident S. Madrone and Westhaven CSD President D. Hankin that will discuss tapping into springs in upper Luffenholtz and rainwater catchment.

Commissioner Lake states the language "as well as those outside City limits where appropriate" in Goal LU-8 should be removed. Lake advised that she spoke with residents regarding this as well, and they were in agreement. Planner Parker notes that section applies to the entire water service area, not just City limits. There is a brief discussion about annexation and how formation of service district might work. Additionally, Lake advised she had done her own research regarding the origin of related policies, and when she requested further clarification the Planner had limited information.

Public Comment

D. Cox (Trinidad Resident) states that the City needs to ensure water service for residents first. She is not in favor of a district.

E. Weinreb (Greater Trinidad Area Resident) states that no one in Westhaven wants to hook up to HBMWD water.

S. Laos (Trinidad Rancheria) notes that Westhaven CSD obtained a grant to find and repair leaks in their water system.

Commissioner Discussion

Commissioner Graves summarizes his conversation with County planning staff regarding an investigation into possible illicit water diversions on Luffenholtz Creek.

Commissioner Johnson notes an error in table 3 of the water demand assessment. Commissioner Graves expresses his concern regarding the amount of water loss in the City's system.

VI. COUNCIL REPORT

There was no Council report.

VII. STAFF REPORT

There was no staff report.

VIII. FUTURE AGENDA ITEMS

Commissioner Stockness noted that septic and parking capacity are both concerns for ADUs, and suggests that parking needs to be further discussed.

Commissioner Lake states that the Coastal Commission staff comments on the draft general plan should be forwarded to the City Council. She notes that "correspondence" used to be part of the Council agenda, and they should be receiving City correspondence.

IX. ADJOURNMENT

Next meeting regularly scheduled meeting is September 18, 2019. Meeting has been adjourned at 8:20 pm.

Submitted by:

**Trever Parker
City Planner**

Approved by:

**John Graves
Planning Commission Chair**

MINUTES OF THE REGULAR MEETING OF THE TRINIDAD PLANNING COMMISSION
WEDNESDAY, SEPTEMBER 18, 2019

I. CALL TO ORDER/ROLL CALL (6:03 pm)

Commissioners Present: Graves, Kelly, Lake, Johnson, Stockness

Commissioner Absent:

City Planner Staff: Parker

City Staff: Zetter

II. APPROVAL OF MINUTES

August 21, 2019

Commissioner Lake requested a change on page 3, regarding the discussion of LU-8. Lake will email her suggested corrections.

Motion (Johnson/Kelly) to continue approval of minutes at the October 16, 2019 meeting. Passed unanimously (5-0).

September 4, 2019

Commissioner Graves requested an update be made on page 3, stating he acknowledged Commissioner Stockness' arrival at the meeting; thereby removing "debriefed."

Motion (Stockness/Lake) to approve the minutes as amended. Passed (4-0, 1 abstention Johnson).

III. APPROVAL OF AGENDA

Approval made by acclamation.

IV. ITEMS FROM THE FLOOR

Commissioner Johnson stated the City's Emergency Operations Plan (EOP) is out of date, having last been updated in 2003, while further advising it does not mention coordination with Westhaven CSD/Fire Dept. or the Rancheria. Further, multiple pages are not properly printed and it is based on having a Trinidad Police Dept. Commissioner Johnson opined that updating the EOP needs to be a priority. Commissioners Graves and Lake concurred. Commissioner Lake and Commissioner Stockness mentioned Steve Madrone's presentation at the City Council meeting on September 10, 2019 where he talked about the area's poor fire rating.

A Friends of Scenic Drive representative provided flyers, and explained the organization is seeking community support for a petition to have the County prioritize fixing Scenic Drive.

Commissioner Lake posed multiple questions. First, she requested to know if any new comments on the general plan from the Coastal Commission have been received since July. City Planner Parker advised she just recently received more comments. Lake questioned if there were any updates on the implementation ordinances. Parker responded no. Lake requested an update on the after-the-fact CDP permit for the changes to the Edwards St. bluff parking time limits and temporary closure of the Van Wycke trail. She stated the City never issued CDPs for those activities, so the CCC is now requesting it be done after the fact. Parker stated she hasn't seen the letter and was not aware of the Van Wycke trail closure. In regards to the 20-minute parking, the City Council was advised that the

Coastal Commission was recommending that a CDP was needed; however, they did not provide any examples of CDPs issued for similarly small parking changes. The City Council voted in favor of changing the parking to 20 minutes without a CDP.

Lake opined that the curb needs to be repainted gray, and the trail needs to be opened. Parker reiterated the change in parking was already approved by the Council, and that it will be up to the Council to decide the appropriate course of action for both projects. Commissioner Graves reminded the Commission that if the Council has approved the change in parking it is a moot topic for the Planning Commission. Lake stated she is only requesting an update on the after-the-fact CDP permit. Lake stated the City can't close a trail or alter parking without a CDP, and further stated a CDP gives the community an opportunity to appeal it. Parker reiterated that she didn't know anything about the letter from the Coastal Commission, and it would be up to the Council or City Manager to ask her to pursue a CDP. Parker did acknowledge that parking policies and changes should be carefully reviewed, because the City has incrementally lost parking over the last several years. Lake opined the City is not following regulations and the City needs a parking study.

Lake mentioned link in the flyer for the Trinidad LCP does not work. Parker stated that that is an old flyer, but the City is working on creating a dedicated section for the LCP updates on the website. She noted that her priority right now is dealing with grant requirements/deadlines. Lake opined the City website calendar needs to be updated. Lake requested staff include the General Plan update as part of the meeting descriptions on the website calendar. Stockness stated she will pass along meeting information to Patti Fleschner, who can publish it in the Mad River Union.

V. AGENDA ITEMS

- a. General Plan Update: Discussion of (a) updated draft Land Use Element and (b) December 2012 draft Noise and Public Safety Element.

Staff report

City Planner Parker explained she made updates to the Land Use Element, which included recategorizing policies and programs and adding "other initiatives" as recommended by the Coastal Commission. She also revised language as recommended by Coastal Commission staff. She noted that there are 64 mentions of the word *harbor* in the Land Use Element, so she would like guidance on what to officially call the harbor area in the General Plan. Additionally, Parker provided the December 2012 Noise and Public Safety Element (approved by the Planning Commission in 2012) to the Commission for review; it will also be updated when the Coastal Hazard Report is completed.

Land Use Element: Page 1

Commissioner Johnson questioned whether there are other ways to work with the Coastal Commission other than just receiving comments in edits and suggested edits. He opined that it would be helpful to have the local Coastal Commission staff present at the Planning Commission meetings. Parker stated she can meet with the Coastal Commission staff, or the Planning Commission could create a sub-committee. Commissioner Lake opined staff should research how other cities handle it.

Commissioner Stockness stated the cited number of residents on page 1 needs to be updated. Parker advised the information used is from the 2010 census, and clarified the 2020 census data takes a few years to become available. Furthermore, Parker cannot confirm if the 2010 data is more reliable than the 2018/2019 American Community Survey data. Graves suggested adding the word

“approximately.” Parker stated that if the City is citing the 2010 census in the General Plan, the information used should match the data. It was noted that the number of housing units in the City should also be updated with the most recent information.

Lake discussed the structure and organization of the Land Use Element, stating there are changes she wants made for clarity. Stockness agreed with Lake; she opined the document must be as straightforward as possible for the public. Lake further stated some of the language used makes reading the Land Use Element confusing. Lake used the rewritten title of *Land Use Designations* (Section B) as an example. Parker explained the reason for the change from “Within City Limits” to “Designations.” Graves agreed with Parker’s reasoning, clarifying for Lake that the zoning and land use designations referenced in the General Plan are different. Both Johnson and Graves were fine with the current format, as it does not limit their ability to go through the document. Parker stated she will make an attempt at some reorganization and bring it back to the Planning Commission.

Commissioner Kelly stated the Coastal Commission recommended adding a separate element for sustainability, but opined creating a new element would slow the Planning Commission down. Parker agreed, stating that sustainability comes up throughout the plan, so it would be difficult to separate it all. Lake opined that it should be removed from other sections and added to the Land Use Element. Parker advised that sustainability measures are woven throughout the General Plan. Parker stated that if sustainability is made into a separate element, it would appear to be an afterthought. Lake opined it makes more sense to combine it. Kelly agreed with Parker that it makes sense to have it woven throughout the General Plan.

Johnson discussed section C of the Table of Contents: Development Outside City Limits. He questioned why a Water Service Area was not included. Parker explained that, yes, it is a city service area, but there is overlap. For clarification, the city service area is the water service area. Johnson opined that at some point the service area needs to be defined.

Lake stated that outside City limits should not be included in the General Plan. Parker advised it does need to be included, due to growth development. Lake opined it should not list that the City serves residences outside City limits. Parker advised the City already does serve residences outside City limits, so it must be listed in the General Plan. Johnson clarified for Lake that the City does not want two different sets of policies regarding water.

Land Use Element: Page two

Johnson noted that the last sentence in the paragraph before LU-1a is missing a "to."

Lake discussed moving LU-1a to be with LU-1b; she doesn't think it makes sense in its current location. Graves suggested content be reviewed before reviewing organization. Kelly and Johnson agreed with Graves. Parker did agree that there are sections where reorganization will be helpful. Parker suggests that Lake email her suggestions in order to improve efficiency.

Land Use Element: Page three

Kelly questioned the use of “neighborhood compatibility” in the Urban Residential section. She requested clarification on what are the legal implications if the City, for example, rejects an ADU due to “neighborhood compatibility.” Graves stated that relative to state law the City is able to make a rejection based on neighborhood compatibility, but there are limiting factors.

Graves requested rewording "Signage is not to be designed to be seen from the freeway." Parker advised she will reword it. Johnson questioned the definition/purpose of "Maximum Density." Parker explained that State general plan law requires a persons per acre for each land use designation. Additionally, she stated it is common to have a maximum lot coverage, due to issues such as stormwater. Johnson questioned what is the City more interested in: the size of the lot or coverage area. Parker stated both, noting that minimum lot size is almost a moot point in the UR zone. Maximum lot coverage is important, due to considerations such as impervious surfaces. Graves noted that the City is an almost built out community, and as there are multiple non-conforming lots, he prefers specification of coverage.

Land Use Element: Page Four

Graves stated he prefers the use of the term "*Harbor Area*," because it is encompassing. Stockness stated she wants "Harbor Area" to be capitalized. Lake questioned the zoning of the Harbor Area. Parker provided a brief description of the zones, which correspond to the land use designations, and stated she will provide maps next time. The usage of Harbor designation was discussed.

Johnson mentioned the reference to a number of undeveloped PD (to be MU) parcels that are referenced in the MU description and on page 13, which were discussed at the previous meeting on September 4th. He advised that it is too early to remove them from the designation of mixed use. He intends to discuss with the Land Trust what the land's development potential is and what their intentions are.

Lake requested Parker reword "Development does not create conflicts with nearby residential areas and is located near convenience shopping facilities and/or recreation destinations" in the VS description (top of the page). She opined that conflicts should be *buffered*. After discussing the use, Kelly and Lake agreed the use of *compatible* would be appropriate instead in order to word it in a more positive manner.

Johnson stated the City needs to distinguish between coastal-dependent uses verses coastal-related uses. Parker advised they are in the glossary, or she will add them if not.

Land Use Element: Page 5

Johnson noted a punctuation correction the in PC description section. In addition, a couple of corrections were made to the OS description, including the example appropriate technologies listed in parentheses.

Lake suggested writing a policy/program in regards to cell towers in the Public and Community section. Graves agreed there should be one written, but that it should not be included in the description of the land use designation. Parker opined the Circulation Element would be more appropriate.

Public Comment

None.

VI. STAFF REPORT

Parker has a number of project applications, which will be brought to the Commission in the coming months.

VII. ADJOURNMENT

Another special meeting to discuss the general plan update is scheduled for October 2nd. The next regularly scheduled meeting is October 16, 2019. The meeting was adjourned at 8:02 pm.

Submitted by:

**Angela Zetter
Administrative Assistant**

Approved by:

**John Graves
Planning Commission Chair**

DRAFT



Filed: September 12, 2019
Staff: Trever Parker
Staff Report: October 9, 2019
Commission Hearing Date: October 16, 2019
Commission Action:

STAFF REPORT: CITY OF TRINIDAD

APPLICATION NO: 2019-10

APPLICANT (S): Rolf Rheinschmidt

AGENT: NA

PROJECT LOCATION: 15 Berry Road

PROJECT DESCRIPTION: Design Review and Coastal Development Permit to construct a 36' x 24', 864 sq. ft., 16' tall, detached garage. A garage was previously approved by the Planning Commission in February 2007, but was never constructed, and the approval has expired; the concrete foundation for the garage was already constructed under the previous approval.

ASSESSOR'S PARCEL NUMBER: 515-331-047

ZONING: SR - Suburban Residential

GENERAL PLAN DESIGNATION: SR - Suburban Residential

ENVIRONMENTAL REVIEW: Categorically Exempt from CEQA per § 15303 of the CEQA Guidelines exempting new construction of small structures, including single-family homes on residentially zoned property.

APPEAL STATUS:

Planning Commission action on a Coastal Development Permit, Variance, Conditional Use Permit, and/or Design Review approval application will become final 10 working days after the date that the Coastal Commission receives a "Notice of Action Taken" from the City unless an appeal to the City Council is filed in the office of the City Clerk at that time. Furthermore, this project is ~~is~~ / **is not** X appealable to the Coastal Commission per the City's certified LCP, but may be appealable per Section 30603 of the Coastal Act.

SITE CHARACTERISTICS:

The property is located on the north side of Berry Road, just east of Frontage Road. Access to the site is provided from Berry Road. The site is bordered by Frontage Road on the west, residential land to the east, vacant land to the north, and Trinidad Living Christian Assembly to the south. The lot is 1.08 acres (47,045 sq. ft.). The property is currently developed with an 1,834 sq. ft., 3-bedroom manufactured home that has a short-term rental license. A detached garage was approved in 2007, around the same time the house was built. The concrete pad was constructed, but the garage itself was never built. The building site itself is flat, but the lot gradually slopes down toward Mill Creek to the north. The property has a variety of trees and shrubs growing on it, including redwood, Douglas fir, Sitka spruce and red alder. Just west of the property, the land drops steeply off to Frontage road. The site contains a significant amount of fill from past logging and road building, including Hwy 101, some of which has been removed.

STAFF COMMENTS:

This project site was part of a major lot line adjustment and annexation that was completed in 1989. As part of the lot line adjustment, a development plan for the parcels was approved, including building sites and septic system layouts. As conditioned, the previously approved project was consistent with that development plan, as is the current proposal.

The applicant received Planning Commission approval (Design Review and Coastal Development Permit) in February 2005 for the construction of a new 1,834 sq. ft., 3-bdrm manufactured home on the property, along with an attached garage/shop, deck, utilities and a septic system on a vacant lot. In November 2006, the applicant submitted an amendment to the project. The changes included (1) moving the footprint of the garage and making it a detached rather than attached structure; (2) an alteration in the roofline and height of the garage to improve aesthetics; (3) and change in the floorplan of the garage, and the addition of a solarium attached to the residence. These changes were approved by the Planning Commission in February 2007, but the garage building was never constructed, so the approval expired.

The applicant then proposed the same garage earlier this year. Concerns about the size and height of the garage and it's potential to be converted to a second unit were expressed by the Planning Commission, and the applicant was not able to attend a meeting to address those concerns. The applicant chose to withdraw the application until he had more time. This application is for a pre-fabricated metal garage of the same square footage of the previously proposed garage, but much lower in height at 16 ft. Also, the proposed attic and bathroom have been eliminated.

Referrals were sent to Public Works, the City Engineer, Building Inspector and Humboldt County Division of Environmental Health (DEH) for the application earlier this year. Only the City Engineer had comments, which included a request for the site plan to indicate the water service meter and any utilities. This is included as a condition for the building plans. In addition, the City Engineer commented that erosion and sediment control BMPs would need to be implemented. Since that time, it has been clarified that the concrete pad for the garage has already been constructed. Therefore, no soil disturbance will be needed for the project, nor are erosion control BMPs.

Potential Conflicts of Interest

No Commissioner owns property within 500 ft. of the project.

ZONING ORDINANCE/GENERAL PLAN CONSISTENCY

The property where the project is located is zoned SR – Suburban Residential. The purpose of this zone is to allow relatively sparse residential development; single-family residences are a principally permitted use. The minimum lot size allowed in the SR zone is 20,000 sq. ft., and the maximum density is one dwelling per 20,000 sq. ft. The property is approximately 47,000 sq. ft.

The currently proposed garage is a detached structure located to the northeast of the residence. The proposed garage is a total of 864 sq. ft. Please refer to the table below for a summary of the square footages. The proposed garage has a height of 16 feet. Floor plans and elevations have been provided. The applicant has been requested to place story poles indicating the outline of the proposed structure.

TABLE 1 - AREAS

	Proposed
LOT AREA	47,045
FLOOR AREA	
Total Residence	1,834
2-car Garage	864
FOOTPRINT (w/ garage)	2,698 s.f.
FLOOR TO LOT AREA RATIO*	
Residence	3.9%
Total Footprint	5.7%

* Note that in the SR zone, the standard maximum FAR would be 10% for a 2,000 sq. ft. house on a 20,000 sq. ft. lot.

Zoning Ordinance §17.56.090 limits accessory structures in Urban Residential (UR) and Suburban residential (SR) zones to a maximum of 15 feet in height. However, planning staff and the Planning Commission made a determination in 1999 that detached garages, which are not defined in the zoning ordinance, are not necessarily accessory structures and are an integral part of the main residence. The staff report for that determination (in association with the approval of a new residence) included the following explanation:

The other point addressed in the Building Official's letter is in regards to the detached garage, which is approx. 23' tall. Discussion with the applicant's agent, the Building Official, and the City Planner centered around the detached garage / office structure, and whether it was considered part of the main residence, or an accessory structure. Zoning Ordinance §17.56.090 requires that accessory structures be limited to 15' in height. Furthermore, design review is not required for accessory structures which are less than 15' in height and 500 sq. ft. Since this is the first project which has come forth proposing a detached garage / structure, some interpretation of the City's Zoning Ordinance language needed to occur.

The City's Zoning Ordinance does not define garages as accessory structures, though sometimes jurisdictions do find them as such. The interpretation that I would present to the Planning Commission, which will set forth future interpretation, is that detached garages, guest rooms, offices and other types of rooms utilized for "occupancy" would be considered part of the main use of the building. Accessory structures would therefore include sheds, greenhouses, etc. There are two reasons that I suggest this, which are actually part of the interpretation. The first reason is in consideration of the application before you. There is no specific reason to support that [the] garage structure should be limited to 15'. Architecturally, this would look different than the architecture used for the main building. The other concern is how detached garages are defined for the remainder of properties in town within the UR or SR Zoning designations. If detached garages are accessory structures, then as long as they are less than 15' tall, they can be constructed or remodeled up to 500 sq. ft. (20' x 25') in area on any property, without requiring Design Review (§17.60.030). If these detached garages were considered part of the primary residence, then when proposed, would require Design Review, which would then require sewage disposal issues to be addressed.

For the above reasons, I am finding that the detached garage is part of the main residence and as such meets the building height restriction of 25 feet.

The Planning Commission at the time agreed with staff's analysis and approved the project, setting policy for such projects in the future. The issue does not come up very often, as most garages are attached to the primary residence and therefore subject to residential development standards. However, in cases where garages meet the requirements for an accessory structure (e.g. 15 ft. in height or less), it may make sense to regulate them as such; that came up in another recent project. This is an issue that should be clarified in the zoning ordinance update.

To maintain consistency with the previous approval of this project, and others, the proposed garage is not considered an accessory structure as defined in the Zoning Ordinance (§17.08.690 – *Accessory structure means a detached building or structure, the use of which is accessory to the use of the lot*) subject to the height limitation of 15’ in §17.56.090. As part of the main residence, the garage is still subject to the maximum building height of the SR Zone, which is 25 feet (§17.28.070) as well as setbacks and other residential building standards (accessory structures do not have to meet side or rear setbacks), which is fairly consistent with regulations in other jurisdictions. Having said this, the Planning Commission can discuss a different interpretation / policy for this and future projects.

The Suburban Residential zone (§17.36.050) requires minimum yards of front 30’, rear 20’, and side 10’ (§ 17.36.060). The parcel faces Berry Road to the south. The plot plan indicates that the yard requirements will be met. Section 17.56.110 allows eaves and overhangs to extend 2.5’ into side yards and 4’ into front, street-side and rear yards. Decks and stairways, landings, balconies and uncovered porches are allowed to extend up to eight feet into front, rear or street-side yards and three feet into side yards. All of these setbacks are met by the proposed project.

The maximum height allowed in the SR zone, by Zoning Ordinance § 17.36.06 (average ground level elevation covered by the structure to the highest point of the roof), is 25 feet, except that the Commission may require a lesser height in order to protect views (§17.27.070). The maximum height, as shown on the plans, of the proposed structure, as defined by the Zoning Ordinance, is 16 ft.

The Zoning Ordinance (§ 17.56.180) requires 2 off-street parking spaces other than any garage spaces. There is ample room for two parking spaces in the driveway shown on the plot plan (§17.56.180). There is an existing 3-bdrm septic system serving the residence. No additional bedrooms are proposed, and there is a deed restriction in place from the previous project.

The Trinidad General Plan and Zoning Ordinance protect important public coastal views from roads, trails and vista points and private views from inside residences located uphill from a proposed project from significant obstruction. The project is not readily visible from any public viewpoints or any residences located upslope.

Significant grading and excavation was required for this project, but has already been completed. As conditioned in the previous approval a drainage and grading plan in accordance with the City’s grading ordinance (Chapter 15.16 of the Municipal Code) was required. The concrete pad for the garage has already been constructed. Therefore, no additional ground disturbance is necessary.

Exterior materials of the pre-fabricated garage are metal. The colors, as stated on the plans will match the exterior of the existing residence. The roof material is also metal.

SLOPE STABILITY:

The project site is not mapped as being unstable or of questionable stability on Plate 3 of the General Plan. The northern portion of the lot, approximately within the 100' creek setback, is mapped as being of questionable stability; the building site is outside of this area. However, there are steep slopes just to the west of the building site. A Geologic Report (Walter B. Sweet, April 15, 1998) was required as part of the past lot line adjustment, and the previous construction was subject to the recommendations of that report, which have already been implemented. Also, the project site falls within the Alquist-Priolo Fault Hazard Special Study Zone. However, the garage is exempt from the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, and no additional studies are required.

SEWAGE DISPOSAL:

The proposed septic system layout has been shown on the plot plan. The City's standard condition of approval for requiring a deed restriction limiting the number of bedrooms on the property without further approval of adequate sewage disposal was completed as part of the original permitting.

LANDSCAPING AND FENCING:

Some vegetation removal was included as part of the previous approval in order to clear space for the proposed improvements. Site clearing has already been completed.

Native landscaping proposed around the front yard was previously approved. No fencing is currently proposed.

DESIGN REVIEW / VIEW PROTECTION FINDINGS:

Because the project is located within the Coastal Zone and proposes a new structure greater than 500 sq. ft. in area and 15 ft. in height, §17.60.030 of the Zoning Ordinance requires Design Review and View Protection Findings to be made as well as approval of a Coastal Development Permit. Recommended Design Review / View Preservation Findings are written in a manner to allow approval, without endorsing the project. However, if information is submitted at the public hearing or public comment received indicating that views, for instance, may be significantly impacted, or the structure proposed is obtrusive, the findings should be reworded accordingly.

Design Review Criteria

- A. *The alteration of natural landforms caused by cutting, filling, and grading shall be minimal. Structures should be designed to fit the site rather than altering the landform to accommodate the structure.* Response: The site has already been graded in accordance with a previously approved grading plan. A concrete pad for the garage has already been constructed. No additional grading is required for the proposed garage.
- B. *Structures in or adjacent to open space areas should be constructed of materials that reproduce natural colors and textures as closely as possible.* Response: The project is not in or adjacent to any open space areas.
- C. *Materials and colors used in construction shall be selected for the compatibility both with the structural system of the building and with the appearance of the building's natural and man-made surroundings. Preset architectural styles (e.g. standard fast food restaurant designs) shall be avoided.* Response: Exterior materials and colors will be consistent with existing onsite and nearby residential development, consisting of metal siding and roofing painted to match the existing residence.
- D. *Plant materials should be used to integrate the manmade and natural environments to screen or soften the visual impact of new development, and to provide diversity in developed areas. Attractive vegetation common to the area shall be used.* Response: Large trees and shrubs are already growing along the front yard of the property, screening much of the development from the road.
- E. *On-premise signs should be designed as an integral part of the structure and should complement or enhance the appearance of new development.* Response: No on-premise signs are associated with this project.
- F. *New development should include underground utility service connections. When above ground facilities are the only alternative, they should follow the least visible route, be well designed, simple and unobtrusive in appearance, have a minimum of bulk and make use of compatible colors and materials.* Response: The parcel is already served by underground utilities. No new utilities are required.
- G. *Off-premise signs needed to direct visitors to commercial establishments, as allowed herein, should be well designed and be clustered at appropriate locations. Sign clusters should be a single design theme.* Response: No off-premise signs are associated with this project.
- H. *When reviewing the design of commercial or residential buildings, the committee shall ensure that the scale, bulk, orientation, architectural character of the structure and related improvements are compatible with the rural, uncrowded, rustic, unsophisticated, small, casual open character of the community. In particular:*

1. Residences of more than two thousand square feet in floor area and multiple family dwellings or commercial buildings of more than four thousand square feet in floor area shall be considered out of scale with the community unless they are designed and situated in such a way that their bulk is not obtrusive.
2. Residential and commercial developments involving multiple dwelling or business units should utilize clusters of smaller structures with sufficient open space between them instead of a consolidated structure.

Response: The proposed garage is 864 sq. ft., which is not included in the total residence square footage as defined by Zoning Ordinance §17.08.310. The residence is approximately 1,834 sq. ft., which is less than the 2,000 sq. ft. guideline and less than the 10% floor-to-lot area ratio.

View Protection

- A. Structures visible from the beach or a public trail in an open space area should be made as visually unobtrusive as possible. Response: The project site is not readily visible from a beach, trail or open space area. The project design is consistent with neighboring residential development.
- B. Structures, including fences over three feet high and signs, and landscaping of new development, shall not be allowed to significantly block views of the harbor, Little Trinidad Head, Trinidad Head or the ocean from public roads, trails, and vista points, except as provided in subdivision 3 of this subsection. Response: The proposed residence will not block any public views.
- C. The committee shall recognize that owners of vacant lots in the SR and UR zones, which are otherwise suitable for construction of a residence, are entitled to construct a residence of at least fifteen feet in height and one thousand five hundred square feet in floor area, residences of greater height as permitted in the applicable zone, or greater floor area shall not be allowed if such residence would significantly block views identified in subdivision 2 of this subsection. Regardless of the height or floor area of the residence, the committee, in order to avoid significant obstruction of the important views, may require, where feasible, that the residence be limited to one story; be located anywhere on the lot even if this involves the reduction or elimination of required yards or the pumping of septic tank wastewater to an uphill leach field, or the use of some other type of wastewater treatment facility; and adjust the length-width-height relationship and orientation of the structure so that it prevents the least possible view obstruction. Response: Due to the project location the proposed garage is not likely to block any private views.
- D. If a residence is removed or destroyed by fire or other means on a lot that is otherwise usable, the owner shall be entitled to construct a residence in the same location with an exterior profile not exceeding that of the previous residence even if such a structure would again significantly obstruct public views of important scenes, provided any other nonconforming

conditions are corrected. Response: There was no residence that was destroyed by fire associated with this project.

- E. *The Tsurai Village site, the Trinidad Cemetery, the Holy Trinity Church and the Memorial Lighthouse are important historic resources. Any landform alterations or structural construction within one hundred feet of the Tsurai Study Area, as defined in the Trinidad general plan, or within one hundred feet of the lots on which identified historical resources are located shall be reviewed to ensure that public views are not obstructed and that development does not crowd them and thereby reduce their distinctiveness or subject them to abuse or hazards.* Response: The proposed project is not within 100 feet of the Trinidad Cemetery, Holy Trinity Church, Memorial Lighthouse or the Tsurai Study Area.

STAFF RECOMMENDATION

Based on the above analysis, and as conditioned in the staff report, the proposed project can be found to be consistent with the City's Zoning Ordinance and General Plan and meet the Design Review / View Protection requirements. Therefore, the necessary findings for granting approval of the project can be made. If the Planning Commission agrees with staff's analysis, the proposed motion might be similar to the following:

Based on application materials, information and findings included in the staff report, and based on public testimony, I move to adopt the information and findings in this staff report and approve the project as submitted in the application, and as described in the staff report and as conditioned therein.

PLANNING COMMISSION ALTERNATIVES

If the Planning Commission does not agree with staff's analysis, or if information is presented during the hearing that conflicts with the information contained in the staff report, the Planning Commission has several alternatives.

- A. Alter the proposed conditions of approval to address any specific concerns on the part of the Commission or the public.
- B. Delay action / continue the hearing to obtain further information.
 - In this case, the Planning Commission should specify any additional information required from staff or the applicant and / or suggestions on how to modify the project and / or conditions of approval.
- C. Denial of the project.
 - The Planning Commission should provide a motion that identifies the Finding(s) that can not be made and giving the reasons for the inability to make said Finding(s).

CONDITIONS OF APPROVAL

1. The applicant is responsible for reimbursing the City for all costs associated with processing the application. *Responsibility: City Clerk to place receipt in conditions compliance folder prior to building permits being issued.*
2. Based on the findings that community values may change in a year's time, design review approval is for a one-year period starting at the effective date and expiring thereafter unless an extension is requested from the Planning Commission prior to that time. *Responsibility: City Clerk to verify prior to building permits being issued.*
3. The Applicant shall place roof drainage downspouts away from septic system tank and leachfields. *Responsibility: Building Official to confirm at time revised building permits are issued.*
4. Construction related activities are to occur in a manner that will not impact the integrity of the septic system. The leachfield area shall be staked and flagged to keep equipment off the area. Alternatively, a written description of techniques/timing to be utilized to protect the system will be required from the contractor. If the proposed system area is impacted by construction activities, an immediate Stop-Work Order will be placed on the project. The contractor will be required to file a mitigation report for approval by the City and DEH prior to permitting additional work to occur. *Responsibility: Building Inspector to verify prior to building permits being issued and during construction.*
5. Construction related activities are to occur in a manner that incorporates storm water runoff and erosion control measures as necessary in order to protect water quality and prevent tracking of sediment onto public roads. *Responsibility: Building Inspector to confirm prior building permits being issued.*
6. Recommended conditions of the City Building Inspector shall be required to be met as part of the building permit application submittal. Grading, utilities, drainage and street improvements will need to be specifically addressed at the time of building permit application. Utilities will be shown on the building plans. *Responsibility: Building Inspector prior to building permits being issued.*

ATTACHMENTS

- Applicant submitted plans (4 pages).

Approved Proposed Site plan

From Planning file

AP 515-331-47
* = Trees to Remove

Revised 8/21/06
Yours = *

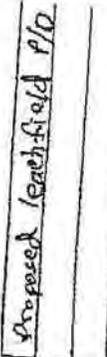
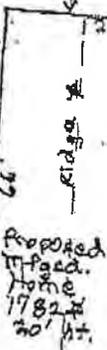
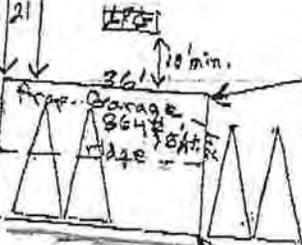
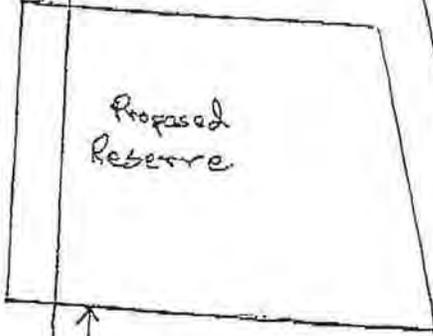
Garage not constructed

Vacant Parcel

Prop. Driveway

Prop. Landscaped Area
Prop. Landscaped Area w/ Native Substratum

uncovered deck 868 sq ft
Prop. Landscaped Area



Typical Documents

Heritage Road

old skid Road 376-26

Over 220' to R/W

± 50' to R/W

± 35.00

200.17

± 8-12.00

± 40.00

201.60'

21'

18' min.

10'

10'

5'

10'

10'

10'

10'

10'

10'

10'

10'

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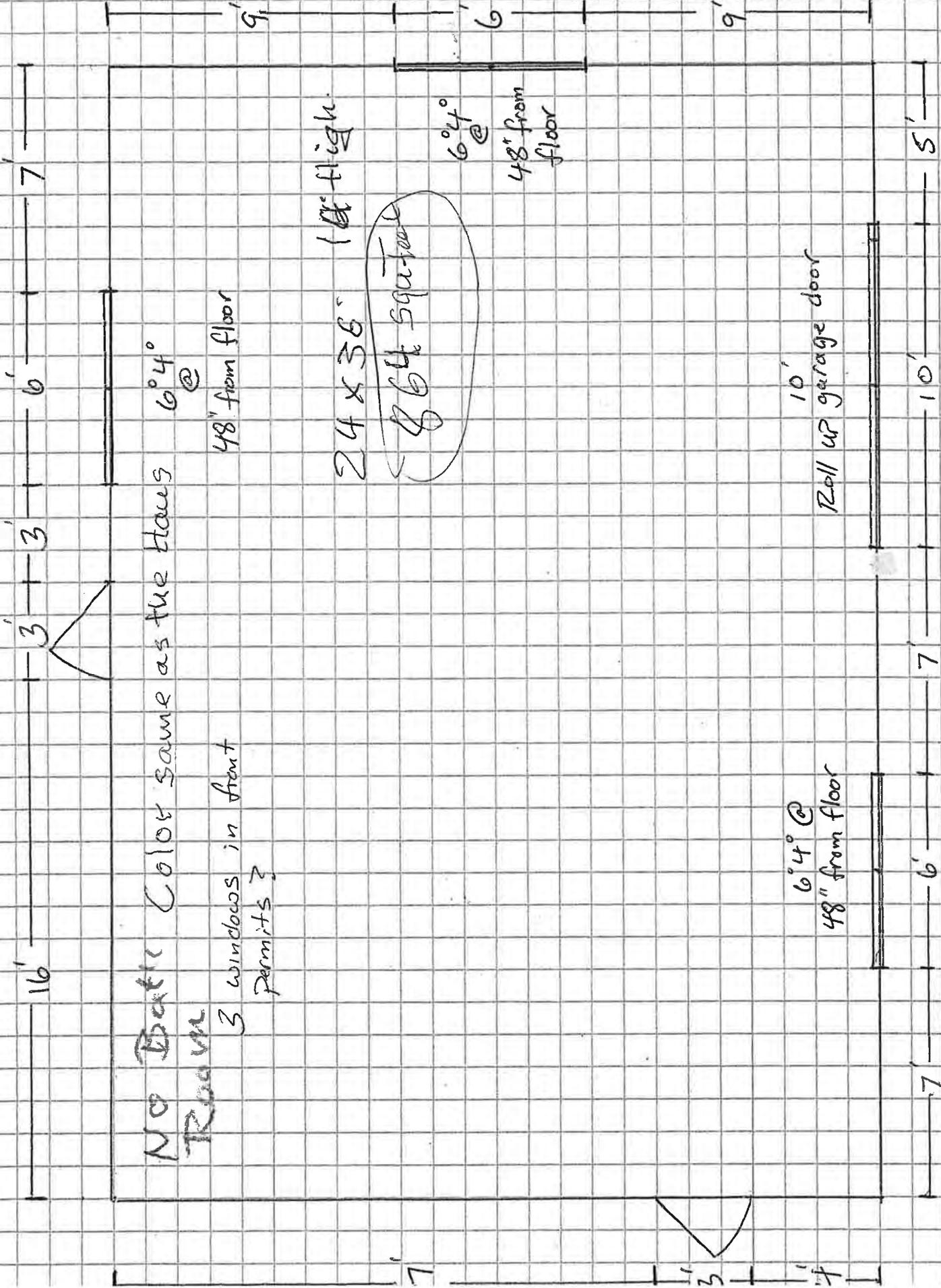
10'

10'

10'

Berry Rd.

Community Church Parcel



No Bath Color same as the Haves

TRAVEL

3 windows in front
permits?

6"4" @

48" from floor

24 x 36" 1st flight

864 sq. feet

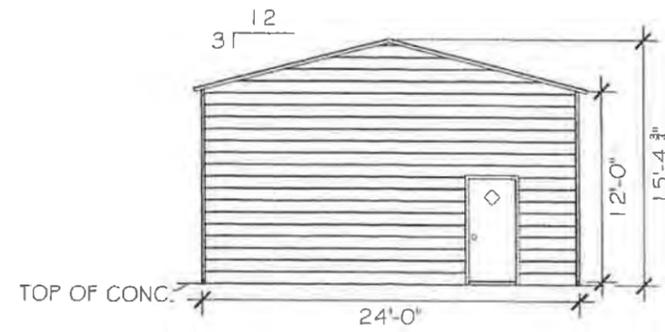
6"4" @
48" from floor

6"4" @
48" from floor

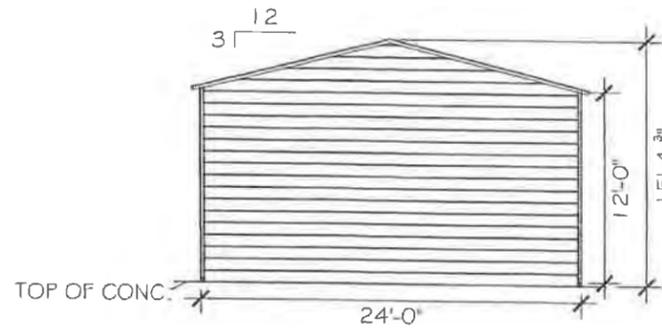
10'
Roll up garage door

Rheinschmidt 15 Berry Rd. Trinidad Co.

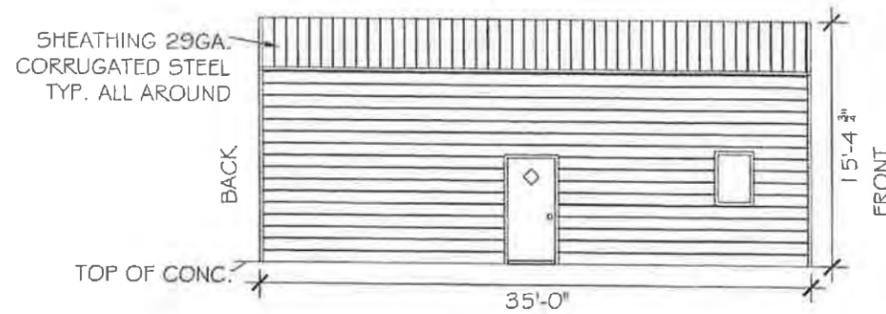




FRONT END WALL ELEVATION
SCALE: 3/32" : 1'



BACK END WALL ELEVATION
SCALE: 3/32" : 1'



LEFT SIDE WALL ELEVATION
SCALE: 3/32" : 1'



RIGHT SIDE WALL ELEVATION
SCALE: 3/32" : 1'

OWNER: ROLS RHEINSCHMIDT	LOCATION: 15 BERRY ROAD TRINIDAD, CA 95570	ELEVATIONS	
	SHEET TITLE:		
DRAWING NO.: MBD67412EOB	PROJECT NO.: 130-19-2066	CHECKED BY: AB	SHEET NO.: 2 OF 7
DRAWN BY: AB	DATE: 9/24/2019		



P.O. Box 6137
Fresno, CA 93703
Tel: 1-844-800-5413
Fax: 1-559-354-6721

SEAL



EXPIRES: 12/31/2020
DATE SIGNED: **SEP 24 2019**



MEMORANDUM

TO: Trinidad Planning Commission

FROM: Trever Parker, City Planner

DATE: October 10, 2019

RE: General Plan Update – Water Policies

At this time, several of GHD's water related reports have been produced. There should now be enough information to continue the discussion regarding water policies (Circulation Element) and the City's service area (Land Use Element).

The following reports and memos are now available:

- Water Treatment Plant Production Rate Test and Analysis (GHD, May 2019)
- Water Demand Assessment (SHN, August 2019)
- Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed (GHD, October 2019)
- Water Demand and Loss Analysis (GHD, October 2019)
- Alternative Row Water Source Evaluation (GHD, October 2019)

A copy of the May GHD report was provided in the July 1, 2019 Packet, and the August SHN report was provided in the August 21, 2019 packet; a corrected Table 3 / page 7 has been provided with this packet. Copies of the three October GHD reports/memos have also been provided in this packet.

The primary section in the General Plan for water service related policies are in the Circulation Element. As a reminder, one of the Coastal Commission staff's comments had to do with recategorizing policies and programs. For the Water Service section of the Circulation Element, they provided a few examples / suggestions, including that CIRC-12.1, 12.2, 12.3, 12.9 and 12.10 be categorized as programs. That is the only comment on this section from CCC staff thus far. I have updated the text based on the new information within the various water reports, but I have not done a lot of editing of the policies without further direction from the Planning Commission.

In addition to the water service policies in section 12 of the Circulation Element, there are also water related policies within section D of the Land Use Element, which I have also provided for discussion at this meeting. I have done some updating of the text

since the last time it was reviewed by the Planning Commission. Note that many of the policies overlap, and the same policies occur in both sections (Land Use and Circulation Elements). In terms of water service, the Sphere of Influence and Service Area policies are the most pertinent. This is also where annexation should be further discussed. To that end, I provided the annexation / Sphere of Influence policies from both Crescent City and Fort Bragg as examples. Again, I did not add or change a lot of policies until getting further direction from the Planning Commission.

The Planning Area section includes policies for watershed and water quality protections. Coastal Commission staff has commented that many of the policies addressing land outside of City limits should not be included as part of the LUP, particularly the policies regarding commenting on projects in the County within the Planning Area section; I have added a note, similar to one used in Fort Bragg, that these policies are not part of the LCP. Other CCC staff comments have to do with categorization of the goals, policies and programs. From this section, suggested changes include changing Policy LU-8.1 to a goal or principle, and changing Policies LU-7.1, 7.2, 7.3, 8.2, 8.3 and 9.8 to programs. This is the extent of the CCC staff's comments on this section thus far.

At a recent meeting, there were some strong objections made to the idea of a service district. I think some of that stems from a lack of understanding of what that could mean. There are many forms of service districts. Many of them are "dependent" and are governed by another local jurisdiction (city or county). Therefore, the formation of a service district does not mean the loss of City control over the water system. I'm not sure what all the advantages and disadvantages would be; that would have to be studied further, but the concept may warrant further consideration. I have attached a kind of white paper report on special districts for additional information. I am not advocating in favor of a special district, I just want the Planning Commission to be able to have an appropriately informed discussion.

Attachments

The following attachments have been included in order to provide some additional background pertinent to the questions being asked of the Council.

- Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed
- Water Demand and Loss Analysis
- Alternative Row Water Source Evaluation
- Table 3 (p. 7) of the Water Demand Assessment
- "Water Service" section from the draft Circulation Element
- "Development Outside City Limits" section from the draft Land Use Element
- Sample annexation/Sphere of Influence policies from Fort Bragg and Crescent City
- What's So Special About Special Districts: A Citizen's Guide to Special Districts in California



Memorandum

October 2, 2019

To: Eli Naffah, City Manager

Ref. No.: 11198797

From: Steve McHaney, Patrick Sullivan

Tel: (707) 443-8326

cc: Becky Price-Hall, Bryan Buckman, Ryan DeSmet

Subject: City of Trinidad

Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed

1. Purpose

The City of Trinidad's (City) water supply is from Luffenholtz Creek, which is subject to limitations based on the terms of the City's water right as it relates to flows in the creek. The flow in the creek varies significantly throughout the year. Multi-year droughts, other extractions from the creek, and long-term climate change can significantly reduce summer flows. It is possible that stream flows could diminish during dry periods to the point that the City's legal right to extract water is curtailed or drops to zero. This is not only a potential issue for considering future water supply requests, but it could affect existing customers as well. Treatment system characteristics also affect the City's ability to produce potable water; and storage and distribution system characteristics affect the City's ability to distribute water.

Potable water is an important resource and the City is in the process of developing policy related to water supply for both existing customers as well as potential future customers. The policy is expected to consider not only potential changes in demand over time, but also potential supply limitations.

The purpose of this memo is to provide a summary of some of the more significant issues associated with the City's extraction of water from Luffenholtz Creek. These insights are intended to help inform development of water policy by the City. It is the future policy that should guide the City in reviewing future water supply requests and guide the City during periods of curtailed supply.

This memo is divided into the following sections:

- Summary of Findings and Recommendations
- Background
- Watershed Characteristics
- Water Rights
- Historical Water Supply in Luffenholtz Creek
- Trinidad's Use of the Existing Water Right
- Future Water Supply in Luffenholtz Creek
- Concepts for Addressing the Extraction Zones



- Recommendations

2. Summary of Findings and Recommendations

The following highlights the findings from this analysis:

- The City has a water right for a maximum extraction of 0.56 cfs (251 gpm)
- The City typically runs the water plant at about 70 gpm and may push capacity up to about 105 gpm
- The water right includes required bypass flows that must remain in the Creek
- The City recently installed equipment for continuous monitoring of bypass flows
- The flow conditions can be considered as Full Extraction, Curtailed Extraction, and No Extraction based on creek flow
- There is very limited data available for creek flow at the treatment plant and very limited data for extractions of water from the creek up- and downstream from the City extraction
- Based on the very limited data, it is known that the creek flows have been in the Curtailed Extraction Zone during very dry periods
- To date, it appears that limitations in the creek gravels, infiltration gallery, and wet well system have been the limiting factor on extraction rather than a curtailed water right
- Extracting water becomes increasingly more difficult with lower creek flows
- Climate change over the coming decades is expected to change precipitation patterns resulting in more runoff and less percolation as well as higher average temperatures and less fog, which could further reduce dry period flows and may also change demand characteristics.

The following highlights the recommendations from this analysis and the Water Loss Analysis (GHD 2019):

- Maintain continuous monitoring of bypass flows and provide improvements in data management to allow City staff better access to the data
- Further evaluate intake system to better understand limitations and to identify potential system improvements and operational changes to possibly increase intake capacity, especially under low creek flow conditions
- Develop policy for managing shortfalls in water availability (Caused by curtailed water right, practical extraction limitations, treatment limitations, emergencies, etc.)
- Consider potential water demands through 2100.
- Consider alternative long term sources of supply that mitigate the flow and extraction issues with Luffenholtz Creek
- Leak detection and replacement in aging distribution system.

3. Background

Luffenholtz Creek is currently the only source of raw water that serves the City of Trinidad system. The City purveys water to approximately 1,000 people inside and outside City limits. The City's diversion and water plant is located at 1313 Westhaven Dr. Trinidad California adjacent to Luffenholtz Creek. Water for the plant is pumped from a wet well that is filled through an infiltration gallery of perforated pipes located



approximately ten feet below the creek bed. The point of diversion is just upstream of the Westhaven Dr. culvert. The City has current water rights limiting the rate of diversion, the annual maximum diversion, and requiring minimum bypass flows. In addition to water right limitations, the effective water production rates are limited by physical constraints in the processing of the water which include: infiltration gallery limitations, flocculator flow rates, filter fouling rates, backwash periods, and chlorine contact time requirements. In addition, the City has a relatively small amount of finished water storage that could supply typical uses for only a few days and is insufficient for bridging long term supply limitations. The treatment system capacity was addressed previously under a separate memo. The focus of this memo is on the watershed itself, which begins with a general understanding of watershed characteristics.

4. Watershed Characteristics

The Luffenholtz Creek watershed is located south of the City of Trinidad, and has a drainage area above the City's diversion of approximately 2,880 acres and ranges in elevation from 225 to 1,370 feet (USGS 2019). Mean annual precipitation in the Luffenholtz Creek watershed is 60.8 inches (USGS 2019). Precipitation runs off to the ocean via Luffenholtz Creek or percolates into the ground. Water that percolates into the ground can later emerge into Luffenholtz Creek to sustain flows during the dry season. Soil types are predominantly silty to sandy clay loams derived from marine terrace sediments overlying Franciscan bedrock. Hydraulic conductivity is highly variable and ranges from approximately 1 to 20 meters/day in the marine terrace sediments to essentially zero in the underlying Franciscan bedrock materials. The higher porosity intervals of the marine terraces transmit the majority of the groundwater in the watershed. Groundwater elevations are variable and seasonal, however in the lower portions of the watershed groundwater is generally shallow and ranges from the ground surface to approximately 20 feet below the ground surface (bgs). The upland portions of the watershed have groundwater elevations ranging from approximately 20 to 100 feet bgs, depending on factors such as distance from the creek and the season.

Groundwater percolation is especially important for meeting water demands during low flow periods as it is the groundwater that feeds the stream during dry weather. Percolation and recharge of groundwater depends on many factors associated with the soils and geology as well as the frequency and intensity of storm events. Changes in precipitation patterns, even when the annual total remains the same, can significantly affect groundwater recharge and hence dry season creek flows.

5. Water Rights

California Water Law addresses a number of types of water use. People do not own water, but rather have certain rights to use water for reasonable beneficial purposes. Water use is regulated by the California Water Board. Of most relevance in this analysis of the Luffenholtz Creek watershed is the concept of Riparian and Appropriative water rights for surface water.

A riparian right exists on land that touches a water source and does not generally require an application to receive the benefits of the riparian right. Riparian rights usually come with owning a parcel of land that is adjacent to a source of water, and the rights generally remain with the parcel when it changes hands. Water obtained through a riparian right must be used on the property connected to the riparian right.



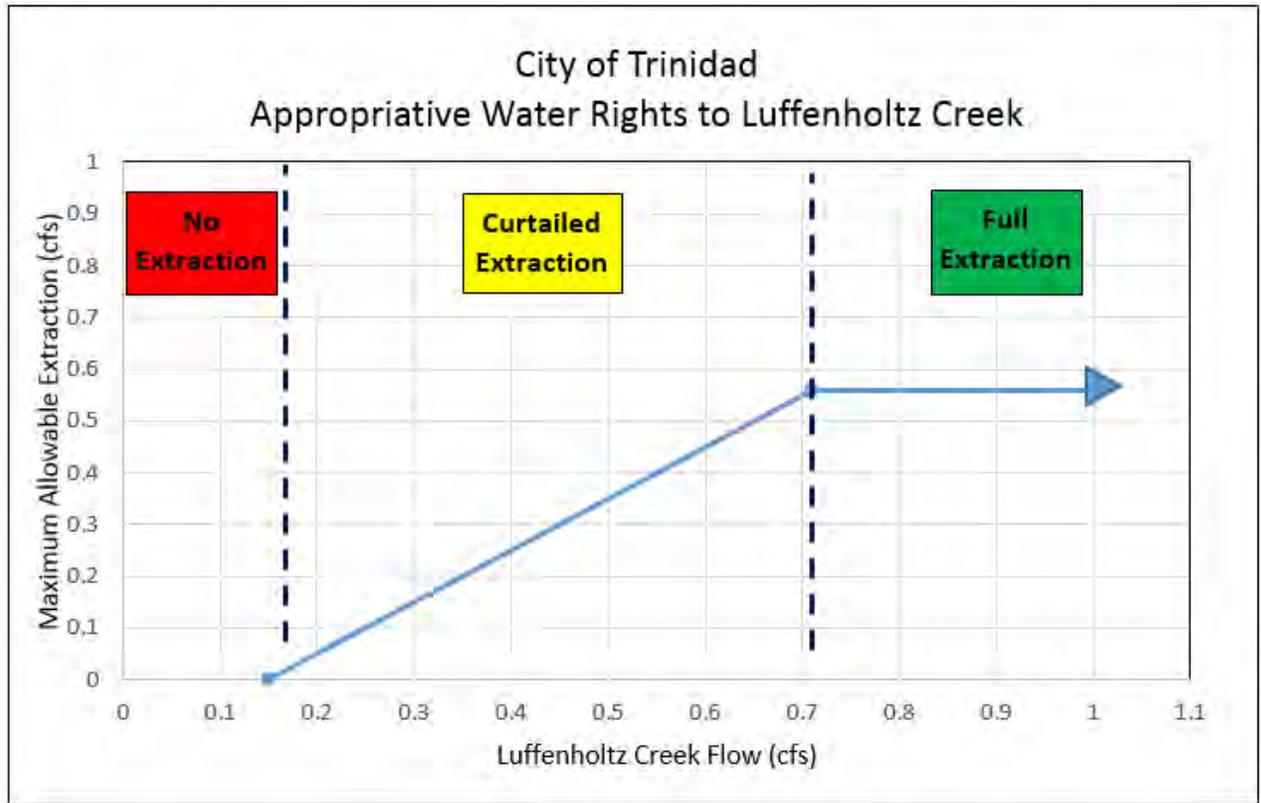
Riparian rights are not lost by non-use, but rather typically remain with the property adjacent to the water source. An unused riparian right is said to be "dormant" and use can be restarted at any time. All riparian right holders on a surface water source have the same priority. If there is not enough water available for the demands of all riparian users, then all users must share the available supply according to their needs. Generally, water used for interior domestic purposes, such as drinking, cooking and bathing, has the highest priority.

When water is to be extracted from a stream for use on non-riparian land then an appropriative right is required. Water right permits and licenses are issued by the State Water Board. There is an order of priority of appropriative rights based on the initial date of the water right. For example, an upstream junior water right holder must allow water to bypass to a downstream senior right holder.

The State Water Board in an effort to better understand water use throughout the state and provide information for water management by watershed has a system for reporting water use for all types of right holders. In some cases, the data gathered on water use, plus data from other sources can indicate to the State Water Board that there is a shortage of water in the basin and that all water rights cannot be fulfilled. The State Water Board can curtail water use of senior water right holders in critically affected basins, which was done during the drought of the late 1970's as well as during the most recent multi-year drought. These water right curtailments did not affect the Luffenholtz watershed, however the State could curtail the water rights on Luffenholtz Creek if deemed necessary.

A review of the State Water Board database for Luffenholtz Creek indicates there are at least three other appropriative rights holders and at least 14 other riparian parcels that submitted a Statement of Diversion and Use. The information in the database is incomplete as it depends on right holders to self-report, plus the program is relatively new and it is possible that not all water users are reporting or are not reporting accurately or completely. As time goes on, the State Water Board may be able to improve the amount and quality of data available in the database, which will help with watershed planning.

The City of Trinidad has two appropriative rights for a maximum extraction of 0.56 cubic feet per second (cfs) (251 gallons per minute) from Luffenholtz Creek through appropriative water rights permit numbers 15984 and 17255. Theoretically, the City has the right to extract up to a daily maximum of 361,440 gallons if the City extracted water 24 hours per day. The City is also subject to a bypass requirement as there is one senior downstream appropriative right and there is an expectation that a certain minimum amount of water is left in the creek. The City's water right stipulates that the City shall bypass 0.25 cfs (112 gpm) except when the natural flow in Luffenholtz Creek is lower than 0.86 cfs (386 gpm) and then the City must leave at least 0.15 cfs (67 gpm) in the creek. From a practical standpoint, this means that the City can generally extract up to 0.56 cfs (251 gpm) until the upstream flow drops to 0.71 cfs which is equivalent to 318 gpm (0.56 cfs plus 0.15 cfs) and then the amount the City can extract decreases as flows decrease. If the creek drops to 0.15 cfs (67 gpm) or less, the City may not extract any water. The City's water right can be considered to have the three Zones of Full Extraction, Curtailed Extraction, and No Extraction as highlighted in the following figure.



6. Historical Water Supply in Luffenholtz Creek

The water supply in the watershed that feeds Luffenholtz Creek varies throughout the year based on weather patterns, extractions, soils and geologic characteristics, surface and groundwater, characteristics, and other factors. As is typical in the region, winter rains increase the flow in Luffenholtz Creek as directly related to individual storm events and over time as related to seasonal accumulation of precipitation in the region.

The peak flow events and seasonal high flow patterns supply ample water for many uses in the watershed. It is the low flow summer period, however, that is of most interest from a water supply standpoint for that is when water supply could become scarce and the City could see flows drop to a level where the City's allowable extraction could be curtailed. The City has been operating the water treatment plant under this summer low flow condition for decades and has adapted operations to allow for continued extractions and treatment of water to meet system demands (see previous memo on the current capacity of the water treatment plant). During the decades of operation, creek flows have been observed predominately qualitatively, although a number of periodic flow measurements have been taken over the years.

In 2001 a Water Supply Feasibility Study was completed for the City of Trinidad, and Technical Memorandum No. 8, Surface Water Technical Feasibility, highlighted a number of factors relating to water supply in Luffenholtz Creek. A summary of water supply characteristics are presented in this memo and the 2001 Technical Memorandum should be referenced for additional details.



Several previous studies have estimated the critical low flow in Luffenholtz Creek. A 1968 water supply feasibility study for the relocation of the Trinidad Water Plant from Mill Creek to Luffenholtz Creek by Winzler & Kelly, forecasted critical low flow in the Creek with a recurrence interval of 100 years. This value was estimated at 290 gallons per minute (0.646 cfs), which is 417,629 gpd based on comparisons with Little River, which had a longer historical data set to work with. However, the use of Little River data is not necessarily representative of the Luffenholtz Creek critical low flows. The two watersheds vary in several key watershed components. The most obvious difference is size. The Little River watershed is 40.5 square miles, approximately 8.5 times larger than the Luffenholtz Creek watershed. This difference is important because it is likely that the Little River watershed maintains a greater amount of water in storage during periods of low flow. Thus, Little River data may over predict the low flow in Luffenholtz Creek. Additionally, the USGS gauge on Little River is located at a much lower elevation within the watershed than the Trinidad Water Plant's point of diversion. At lower elevations within the watershed the stream will be supplied with higher rates of base flow (groundwater) during summer months, will tend to have lower velocities, and the channel will widen out more like an estuary resulting in less dramatic high and low flows. In the higher elevations, such as are the characteristics of the Trinidad water extraction location, the drainage area tends to be steeper and the streams travel at a higher velocity and typically in a narrower channel with more dramatic flow variations.

A 1980 Trinidad Citizen's Report estimated the critical low flow in the Creek at 300 gpm (0.67 cfs), which is 432,030 gpd, based on 80 years of precipitation data in Eureka and Luffenholtz Creek low flow measurements in 1968 and 1977. The 1980 Citizen's Report also stated the lowest recorded flow in Luffenholtz Creek in the 1977 drought was 310 gpm (0.71 cfs). The frequency or method of the collection of these flow data is not known.

The Arcata Union newspaper ran an article about the 1977 drought in its September 8, 1977 issue. The Trinidad Public Works Director at that time, Tom Nelson, told the paper he measured the flow in Luffenholtz Creek at 284 gpm (0.632 cfs). According to the article, the City had predicted that Luffenholtz Creek would stop flowing by the end of August, but that long periods of foggy weather and small amounts of rain were keeping the creek flowing. No record of the creek going dry at this time have been found. This article highlights the potential low flow conditions the City of Trinidad may confront in the future during drought conditions, which could be further exacerbated by climate change and other extractions from the watershed.

A previous search of the Department of Fish & Game files produced three stream surveys for Luffenholtz Creek. They were taken in November 1971, November 1975, and February 1982. These measurements were not taken during the driest part of the year and so they are not expected to represent the lowest flow periods. The lowest flow recorded in any of these surveys is 583 gpm (1.30 cfs), however this measurement was made in the upper portion of the watershed and may not represent flows at the treatment plant. The next lowest flow was 3,142 gpm (7.00 cfs) near the water plant. The methods used by DFG to measure flows are unknown and the time period of the measurements was not the driest time of the year and so these measurements do not provide further insights into the potential critical low flow.

The City of Trinidad has measured flow on Luffenholtz Creek a number of times over the years. The City set up a weir in the early 1990's that was destroyed in a 1997 flood. Only one small data set from the fall of 1994 exists. The 1994 data is based on measuring the flow just below the intake of the water plant, and the total

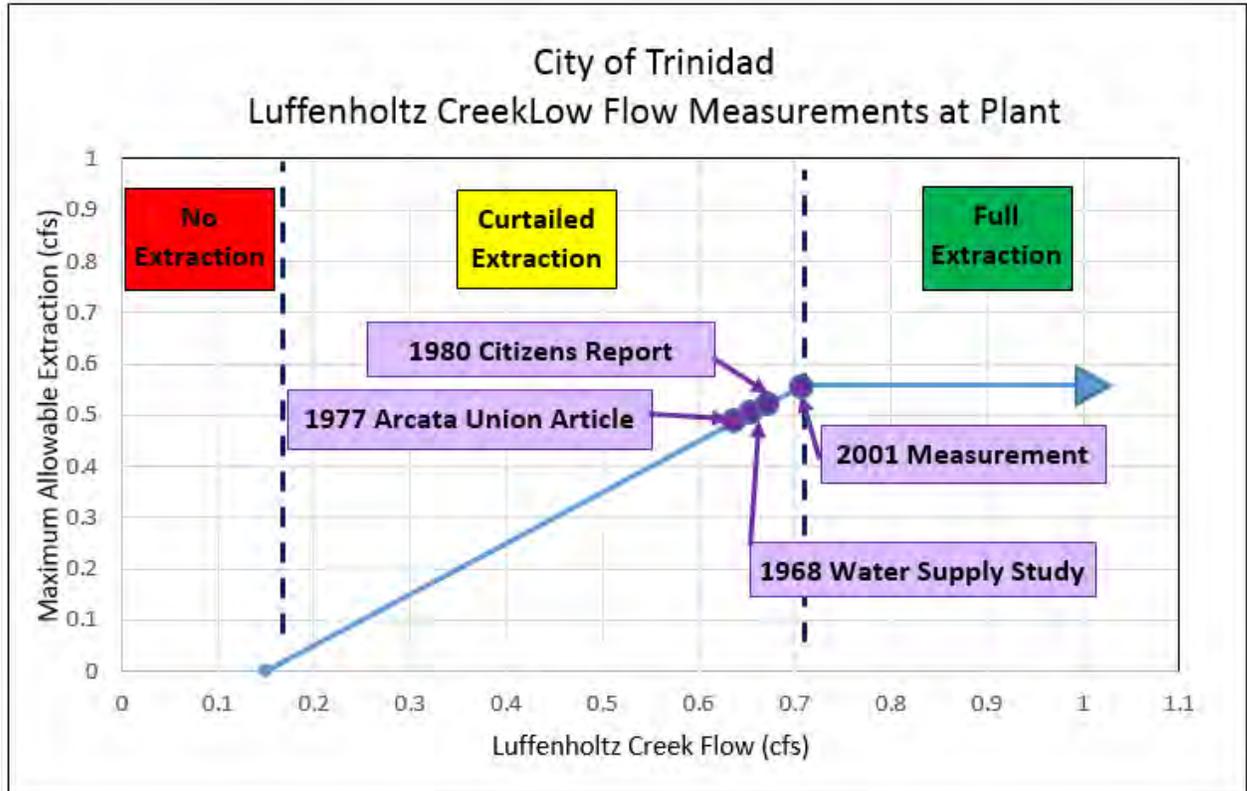


flow was calculated by adding the water plant flow to the measured flow. The 1994 flow data ranged from 421 gpm to 466 gpm (0.94 cfs to 1.22 cfs).

A new weir was constructed downstream of the water plant intake in the summer of 2001 for collecting data. Preliminary data from September of 2001 indicated that without the water plant pumps running, the creek flow was approximately 313 gpm (0.70 cfs). This flow value is just under the City of Trinidad's water right plus bypass requirement. The flow in the watershed can continue to diminish in the fall months prior to winter rains and so it is possible that creek flows continued to drop before gaining again after the winter rains began.

Formal continuous flow monitoring over the life of the treatment plant has not been conducted in part due to the difficulty of obtaining continuous accurate measurements of low flow conditions. However, the State Water Board in recent history emphasized the importance of continuous flow monitoring and the City had flow monitoring equipment installed in the summer of 2017. The recent multi-year drought ended in 2016 and so the data collected so far does not include the recent critical low flow drought period. The City should continue to monitor the flow in Luffenholtz Creek to build a better understanding of the flow characteristics of the creek under a variety of seasonal conditions.

Although the City has a water right to divert up to 0.56 cfs (251 gpm), the City must bypass a prescribed amount of flow, and so low flow conditions may restrict allowable extraction. Periodic monitoring of a number of lower flow conditions over the past decades suggests that the creek flow can drop to levels where the City's extraction could be curtailed below the maximum water right. Four such low flow measurements are shown along with the water rights allowance in the following figure:



Although the City does not have flow data during low flow periods spanning the recent multi-year drought, creek flows may have been in the Curtailed Extraction Zone. Aside from drought, other longer term conditions including additional extractions from the creek as well as climate change could affect creek flows as further discussed in the next section.

7. Trinidad’s Use of the Existing Water Right

The City can extract up to 0.56 cfs from Luffenholtz Creek which is just over 250 gpm. As was outlined in a previous memo, Water Treatment Plant Production Rate Test and Analysis (GHD, May 2019), the City typically extracts at approximately 70 gpm (0.16 cfs) and the operators feel based on their experience that extraction could be increased to approximately 105 gpm (0.23 cfs) during low flow periods. Theoretically, the City could legally extract significantly more water from the creek. However, there are a number of factors that may make this impractical. Aside from limitations in the overall treatment capacity previously highlighted, operational experience indicates that there are limitations in the infiltration gallery extraction system that may reduce the ability of the City to extract water. Operator experience has shown that during low flow periods it becomes increasingly more difficult to extract water. Under low creek flow conditions, water flow through the gravels and into the infiltration gallery and the wet well decreases and cannot keep up with maximum available pumping capacity. Hence the operational experience suggests a current limitation of approximately 105 gpm (0.23 cfs). To increase capacity, the operators can backwash the gravels with water and air during the wet season to clean the gravels of some of the sediments. However, this cleaning process is not



practiced during low flow periods due to the release of sediments from the gravels which would enter the relatively clean low flow stream.

What is not known is how low flows during Curtailed Extraction could further negatively affect extraction performance of the infiltration gallery. Even if water were available to legally extract, very low flow conditions may further hamper extraction capacity. For example, if creek flow were 0.5 cfs (224 gpm), the City could legally extract 0.35 cfs (157 gpm), which is more than twice the typical extraction rate under normal conditions. However, under such low flow conditions the infiltration gallery may not be able to pass this rate and potentially couldn't pass even the typical extraction rate. Further study of the capacity of the infiltration gallery under very low flow conditions should be conducted over time to better document the performance of the infiltration gallery and potentially lead to improvements under low flows.

8. Future Water Supply in Luffenholtz Creek

The water supply in Luffenholtz Creek available to Trinidad could be further reduced in the future. It is expected that upstream extractions, future droughts, and climate change could result in flows more frequently dropping into the Curtailed Extraction Zone.

Future extractions in the watershed are very difficult to predict due to the nature of water rights, possible changes in water uses, very limited and incomplete data on historical extractions, and other factors. Riparian rights holders upstream have the right to reasonable beneficial use, which could include domestic and agricultural extractions or other beneficial uses. Although cannabis cultivation does include additional protections for water supplies, typical agriculture does not. Hence, riparian property owners could legally use additional water from upstream in the watershed. At this time, it is simply unknown how other extractions from within the watershed could affect the water supply for Trinidad, but it is assumed that existing upstream extractions are not likely to decrease over time.

The change in climate could likely have a significant long term effect on the amount of water available in the watershed for all beneficial uses. The effects of climate change have already been documented through analysis of historical climate data. A variety of models have been prepared to forecast the effects of continued climate change. Models suggest that average regional temperatures are expected to increase by three or more degrees Fahrenheit by mid-century. Precipitation models indicate a slight decrease in annual totals by the end of the century, but the patterns are expected to change to fewer larger storm events and greater runoff. In addition to precipitation, fog frequency is also projected to decrease. Although future coastal fog modeling is in the early stages of development, a study performed in 2010 found that over the 20th century there was an approximately 33% decrease in fog along the California coast and the occurrence of fog could further decrease this century. Furthermore, burned areas from area wildfires are likely to increase. The overall implication is that climate change over the coming decades will tend to make temperatures warmer, decrease the occurrence of fog, and change precipitation patterns. Of those factors, the change in precipitation patterns may have the greatest effect on Luffenholtz Creek Flows as it is the slow recharge of groundwater during the winter months that feeds the Creek during the summer months. Fewer more intense storms will tend to result in greater runoff and less percolation into groundwater.



With a variety of factors that are expected to reduce low flows in Luffenholtz Creek over the coming decades, the frequency of flows being in the Curtailed Extraction Zone are expected to increase. Due to the lack of accurate long term flow monitoring data and the future influence of factors affecting the watershed, the frequency, extent, and duration of such Curtailed Extraction periods is not known. However, it is generally known that flows continue to diminish during dry weather until regular seasonal precipitation events return. This suggests that if the City enters the Curtailed Extraction Zone early in the summer, that it could progressively become more significant for up to several months until regular rains return.

Also, as discussed in the previous section, although the City of Trinidad's actual typical water extraction is significantly less than the available legal water right, low flows in Luffenholtz Creek in the Curtailed Extraction Zone may reduce the effectiveness of the infiltration gallery system so that the City cannot practically extract the allowable amount or even the typical amount. Lower flows in the creek can simply reduce the achievable rate of extraction.

9. Summary of Concepts Associated with the Extraction Zones

The concept of Extraction Zones was developed to illustrate the range of creek flows and allowable extraction rates based on the City's existing water rights. The concepts introduced in this analysis are summarized for the three Extraction Zones below.

Full Extraction

Under a full extraction scenario, creek flows are above 0.71 cfs and in general it is expected that the City could reliably extract typical flows in the 70 to 100 gpm range. Even though the City has the legal right to extract at a higher flow rate, historically the City has not needed to extract at a higher flow rate to meet demands. Also, from an operational standpoint, the overall intake system performs better at the lower flow rate. It may be possible to extract at higher than the typical rate of 70 to 100 gpm, but hydraulic restrictions within the gravel bed, infiltration gallery, and wet well system tends to reduce the practical capacity. Based on separate studies, the City could have treatment capacity available beyond current demands when sufficient flow is available in the creek.

Curtailed Extraction

The City's legal right to extract water from Luffenholtz Creek is curtailed when the total creek flow upstream of the City's infiltration gallery drops below 0.71 cfs and diminishes as creek flows decrease. Based on the very limited flow data available, it appears that drought conditions of the past have reduced creek flows to within the Curtailed Extraction Zone. However, the allowable extraction associated with these low flow data points is significantly higher than the typical rate of extraction and so such historical low flow occurrences may not have limited the City's ability to meet water demands at the time. It should be noted, that there was no flow data recorded from the most recent drought and so it is unknown how low the creek flow has recently been. The City's current monitoring of flows should be continued to comply with State Water Board requirements and to provide the City with ongoing information for operations.

It is also important to note in the flows in the Curtailed Extraction Zone are quite low and the limiting factor may not be the water right, but rather may be the ability of the gravels, infiltration gallery, and wet well intake



system to actually convey the water. Quite simply, the current intake system does not operate very effectively at very low creek flows.

What should also be noted is that the Curtailed Extraction Zone is a narrow band of low flows and that climate change and associated changes in precipitation patterns along with potential changes in other extractions from the watershed may lead to more frequent low flow conditions that affect the water right and perhaps more significantly, the practical ability to extract water.

Low flow conditions in the curtailed Extraction Zone could last for weeks or months depending on the conditions. Depending on the severity and circumstances, this could result in a reduction in water available to meet customer needs. Such a condition would require rationing so that the water that was available could be distributed to customers as priorities warranted. This is a matter of setting water policy and developing implementation and enforcement measures.

No Extraction

According to the City's water right, the City must bypass a minimum of 0.15 cfs and if the flow drops below 0.15 cfs, the City is not allowed to extract any water. Although no flows have been recorded below 0.15 cfs, it is possible that climate change and changes in precipitation patterns as well as other extractions in the watershed could lead to this situation under some conditions. If the City was in such a situation, the existing storage would last only a few days and may not be sufficient to bridge the shortfall until wet weather returned and increased creek flow so the City could extract water again.

10. Recommendations

The City's current water supply from Luffenholtz Creek is subject to the requirements of the existing water right and the ability of the City to make adequate beneficial use of the right depends on creek flow at the City's intake as well as other factors such as treatment capacity, and storage and distribution capacity. The analysis in this memo was focused on the watershed, flows in Luffenholtz Creek, and extraction from the creek and the following recommendations are proposed to help address raw water supply issues and to better prepare the City for long term water supply:

The City began continuous monitoring of bypass flows several years ago and monitoring and reporting the State Water Board should continue. The data management system in current use is difficult for operations staff to access and it is recommended that improvements be made in data management to allow City staff better access to the data.

Since the intake system has capacity limitations under lower flow conditions, it is recommended that the intake system be further evaluated to better understand limitations and to identify potential system improvements and operational changes to possibly increase intake capacity.

Based on what is known about the watershed, the water rights, historical low flows, performance of the intake system, and the potential for other supply emergencies such as mechanical failures and natural disasters, it is possible there could be a shortfall in supply under some conditions. This potential for shortfall



exists today with current customers. It is recommended that the City develop policy for managing shortfalls in water availability. The City should also consider how much additional water to allocate to future customers. It is recommended that the City consider a planning horizon to the year 2100, which is the timeframe for typical climate change planning.

The watershed limitations and issues and extraction challenges under low flows cannot be completely mitigated without considering alternative sources of supply with different characteristics. It is recommended that the City investigate alternative long term sources of supply to improve long term system reliability. This is warranted to provide long term reliability to existing customers as well as future customers. Such an analysis should also include projections to 2100.



Memorandum

October 2, 2019

To: Eli Naffah, City Manager

Ref. No.: 11198797

From: Patrick Sullivan

Tel: 7074438326

Subject: City of Trinidad water demand and loss analysis

As the City of Trinidad considers its water supply needs, it is important to evaluate water losses within the existing system. Water losses are defined as water pumped and treated minus the water sold to clients. Identifying and eliminating system losses will have the effect of overall reducing water demand. This memorandum evaluates the amount of water the City produces and compares it to the amount of water sold to quantify the amount of water lost in the system.

Water System Background

The City withdraws water from Luffenholtz Creek to meet the current demand from its customers. Raw water from Luffenholtz Creek is diverted through an infiltration gallery that feeds a wet well. The infiltration gallery allows water to flow into a wet well with intake pumps. Water is pumped from the wet well to a flocculator to reduce turbidity. The water is then pumped through a series of mixed media filters and then through a chlorine contact basin prior to entering the water storage and delivery system. The City has two water tanks that serve as a reservoir and supply the water pressure for the City's piped delivery system. The City's delivery system has several miles of water pipes that convey the water from the treatment plant and storage tanks to the individual customers.

Water Loss

During the process of providing the City with potable water, some water is lost. To account for these losses, the City pumps more water than it provides to customers. Some of these losses are from expected uses and are typical for all water treatment and distribution systems. These include uses such as: backwashing the filters, backwashing gravel bed, flushing hydrants, firefighting and water quality instrument flushing. Water system losses due to expected factors typically accounts for 10% to 20% of the pumped water volume for most municipal water systems. The method for estimating water loss is described in the following *Water Pumping and Sales Records* section. Known water losses due to back washing filters are estimated by visual inspection of the change in water level and not included in the water loss calculation. There is also variability throughout the year as background raw water conditions vary. The primary factor is the raw water turbidity which is higher during storm events and higher flows in Luffenholtz Creek. Higher turbidity in the raw water requires more frequent backwashing of the filters. Operation conditions, like pumping at a higher rate or longer pumping duration may also necessitate more frequent backwashing of the filters. This may cause some variation in water loss that is due to seasonal variability of water use and stream conditions.

Water losses from other causes includes: metering errors, leaks in pipes and connections, and illicit connections. Water loss through leaks in pipes and connections is more common in older pipe systems and



much of Trinidad's water system is in this category. If water losses are greater than 10% to 20%, identifying and eliminating these water losses could have the effect of decreasing the City's water demand.

Water Pumping and Water Sales Records

The City records the amount of water pumped and the amount of water sold. The amount of water pumped is based upon the master flow meter that is located at the treatment plant. The amount of water sold is based upon totaling up the volume of all the water meters throughout the City. The water meters are totaled and recorded each month. To perform this comparative analysis, data from September 2012 to August 2019 were evaluated. The data is included in Appendix A (Figure A-1 and is graphically shown in Table A-1).

During this seven year period, the monthly average of: water pumped, water sold, water lost, and water loss percent were calculated. The monthly average water volume pumped was 2.1 million gallons and the monthly average water volume sold was 1.5 million gallons. The monthly average water loss was 0.6 million gallons with a monthly average water loss percent of 26.6%. There was a large amount of variability in the records with the lowest monthly water lost percent of 8.9% and the highest monthly water lost percent of 40.1%. These summary statistics are presented in Table 1.

Table 1. Monthly Water Pumped, Sold, and Lost Summary Statistics, September 2012 through August 2019

	Water Pumped (gallons)	Water Sold (gallons)	Water Lost (gallons)	Water Loss Percent
Minimum	1,354,490	1,040,922	123,795	8.9%
Maximum	3,314,731	2,434,805	1,117,590	40.1%
Average	2,105,045	1,542,084	562,960	26.6%

The City's water demand varies throughout the year with the highest demands in the months of July and August. The variation is apparent when the City's water pumping, sales and losses are averaged by each month, as shown in Figure 1 and Table 2.

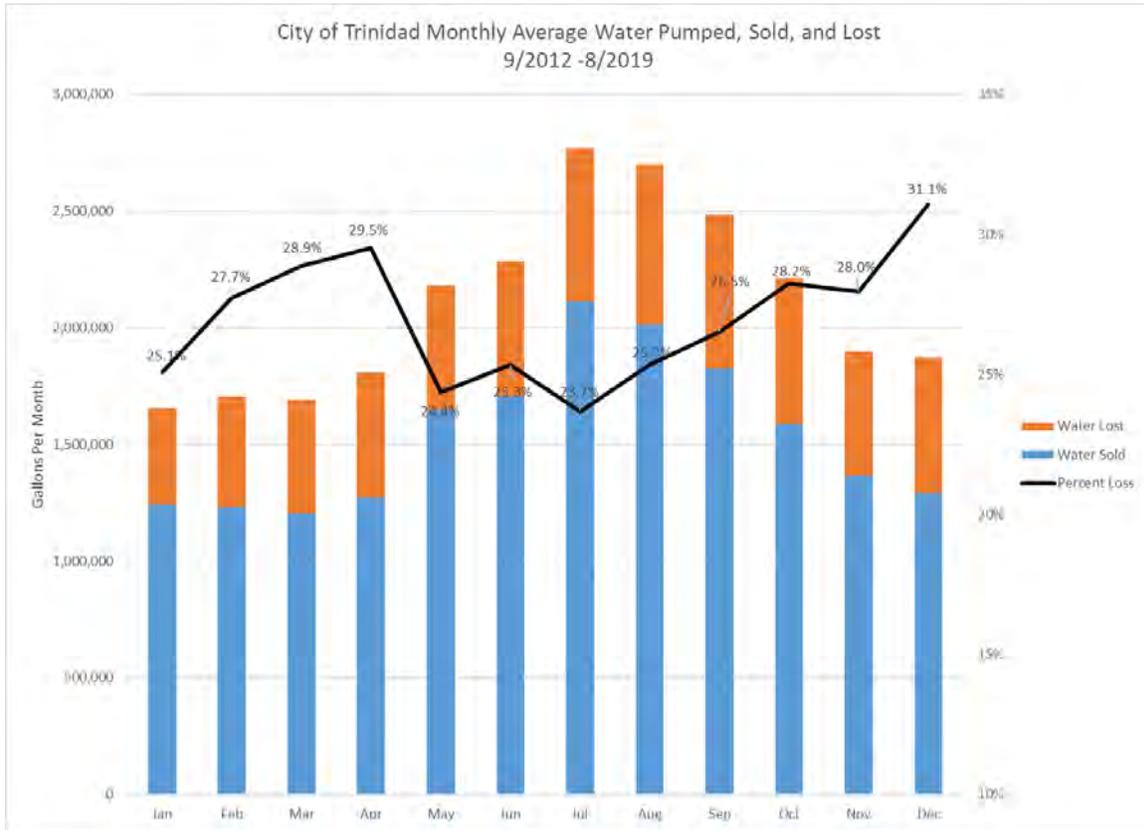


Figure 1. Monthly Water Pumped, Sold, and Lost, September 2013 through August 2019



Table 2. Water Production, Sales, and Loss by Month, September 2012 to August 2019

	Water Pumped (gallons)	Water Sold (gallons)	Water Lost (gallons)	Daily Average Water Pumped (gallons)	Daily Average Water Sold (gallons)	Daily Average Water Lost (gallons)	Percent Loss
Jan	1,657,941	1,242,005	415,936	53,482	40,065	13,417	25.1%
Feb	1,704,689	1,231,878	472,811	60,882	43,996	16,886	27.7%
Mar	1,691,881	1,203,217	488,664	54,577	38,813	15,763	28.9%
Apr	1,807,590	1,274,157	533,433	60,253	42,472	17,781	29.5%
May	2,182,550	1,650,742	531,807	70,405	53,250	17,155	24.4%
Jun	2,285,232	1,706,123	579,109	76,174	56,871	19,304	25.3%
Jul	2,766,948	2,111,838	655,110	89,256	68,124	21,133	23.7%
Aug	2,699,988	2,016,109	683,879	87,096	65,036	22,061	25.3%
Sep	2,485,415	1,826,054	659,361	82,847	60,868	21,979	26.5%
Oct	2,211,611	1,587,153	624,459	71,342	51,198	20,144	28.2%
Nov	1,897,107	1,366,799	530,308	63,237	45,560	17,677	28.0%
Dec	1,869,584	1,288,937	580,647	60,309	41,579	18,731	31.1%

Conclusion

The evaluation of the City’s water production and sales records indicate that system water losses are in the range of 24% to 31% of the total water produced. While losses for some months is decreasing, likely due to replacing water lines and failed meters, it is not consistently observed. In general, the loss values are higher than typically expected for water systems of this type and indicate that there is a potential to reduce water demand by identifying and eliminating system losses. Possible causes for the water losses include the following and are further described below:

- Metering errors,
- Illicit connections
- Bulk water sales
- Leaks in pipes and connections

Water meters are installed at each service connection. Water meters have moving parts that wear with time and use. These meters were installed at various times and the usage for each varies. Therefore, errors in recording the quantities may vary slightly. The City regularly replaces old and worn meters when needed and meters are periodically tested to verify accuracy. Based upon discussions with the City’s public works staff, it is estimated that the amount of error due to water meter accuracy is very low and not expected to be above



1%-2%. Errors with meters may cause an under reading or an over reading and with the number of meters in the system, these errors typically cancel out.

Illicit connections are unmetered connections made to the system without the knowledge or consent of the City. The City's public works staff regularly inspect the system while reading water meters. They do not suspect that any illicit connections have been made. When evidence of an illicit connection is discovered it is quickly resolved by City staff.

Another type of illicit connection is taking water from unmetered fire hydrants. This has not been observed in the Trinidad area but is a common problem in other areas. It typically occurs at night with a water truck hooking up to an unmetered hydrant to fill a water truck. This has become a problem in drought years when illegal marijuana grows and households on wells are in need of water. The higher loss rates during the summer months may be an indication of this type of water loss.

The City does sell water to a bulk water delivery company and sales are typically in the summer and fall months. This company fills water trucks from unmetered hydrants and delivers the water to people with water tanks for domestic use. The company pays the City based on the number of truck loads delivered and the City reports that water usage on an annual basis. Because the trucks are filled from unmetered hydrants, the amount of water sold appears as a water loss. The amount of water sold to bulk delivery ranges from 40 to 50 thousand gallons per year. This is about one days' worth of product or less than 0.3% of the total water produced.

The most likely cause for the high water loss rate is leaks in old pipes and connections. The City has made several efforts to locate leaks from connections. They have hired independent leak detection services to isolate individual leaks. While minor leaks were identified and resolved these leaks would have had only minor effect upon the overall losses in the system. The City's conveyance system of pipes is aging and much of it is constructed of AC (asbestos concrete) pipe. As this type of pipe ages it may become brittle and may form small leaks. When this occurs throughout the system the leaks can add up to a significant loss of water. The solution to this type of problem is to replace the old pipe. Leaks can be detected and sections prioritized for replacement by isolating sections of the system and measuring pressure loss over time.



Appendix A

Memorandum

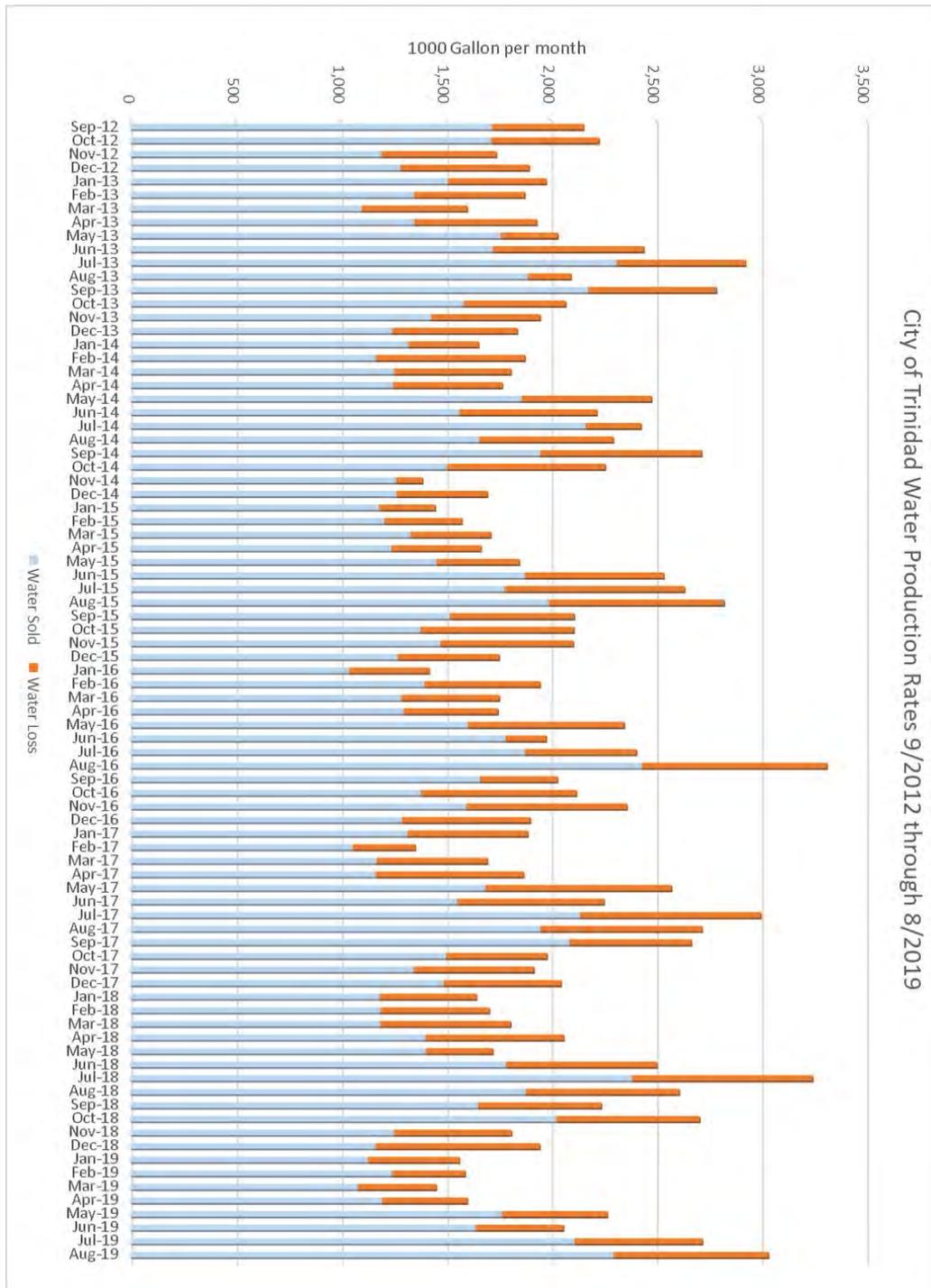


Figure A-1 Monthly Water Production Rates, September 2012 to August 2019

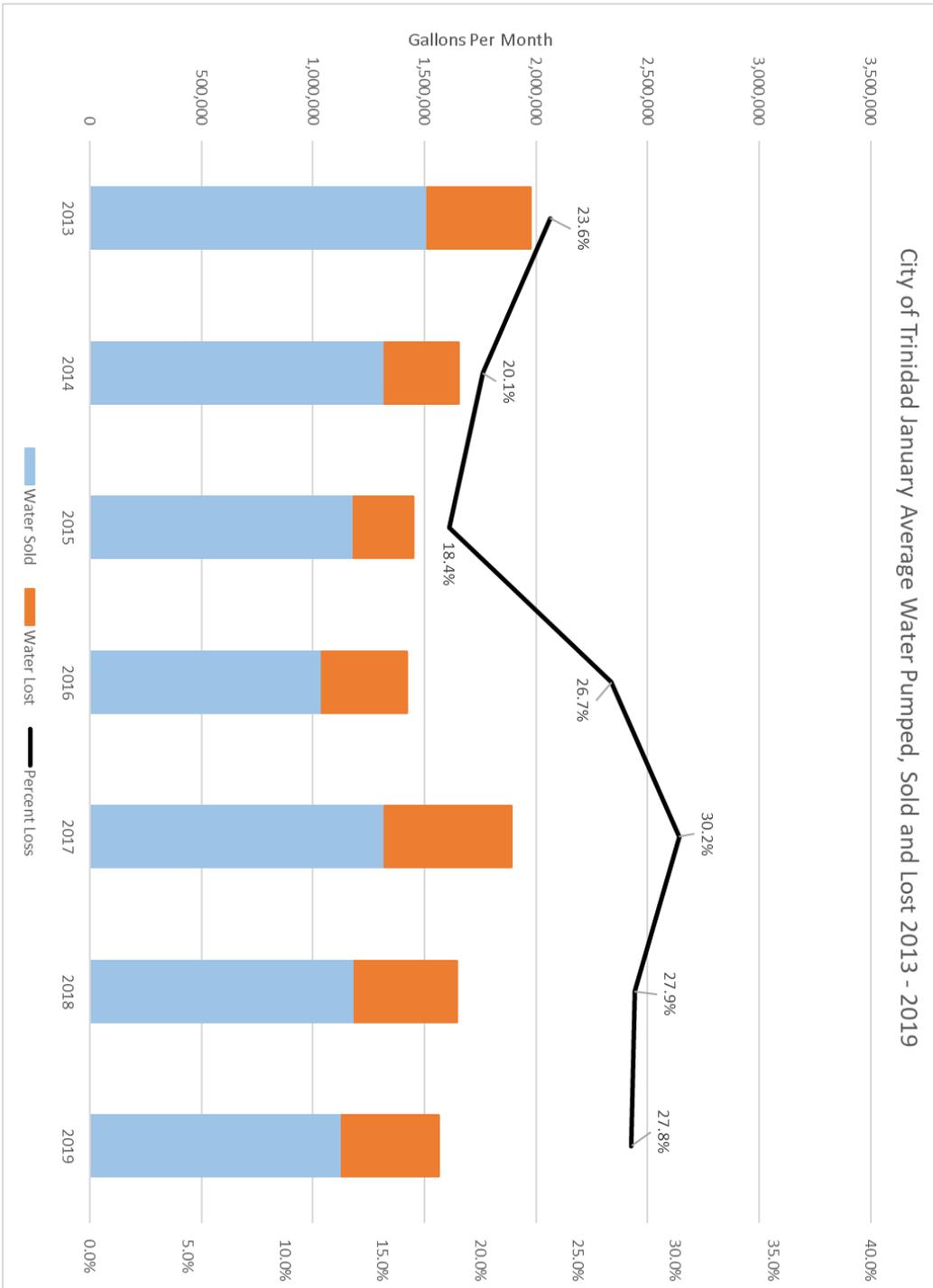


Figure A-2 Monthly Water Production Rates January 2013 to 2019

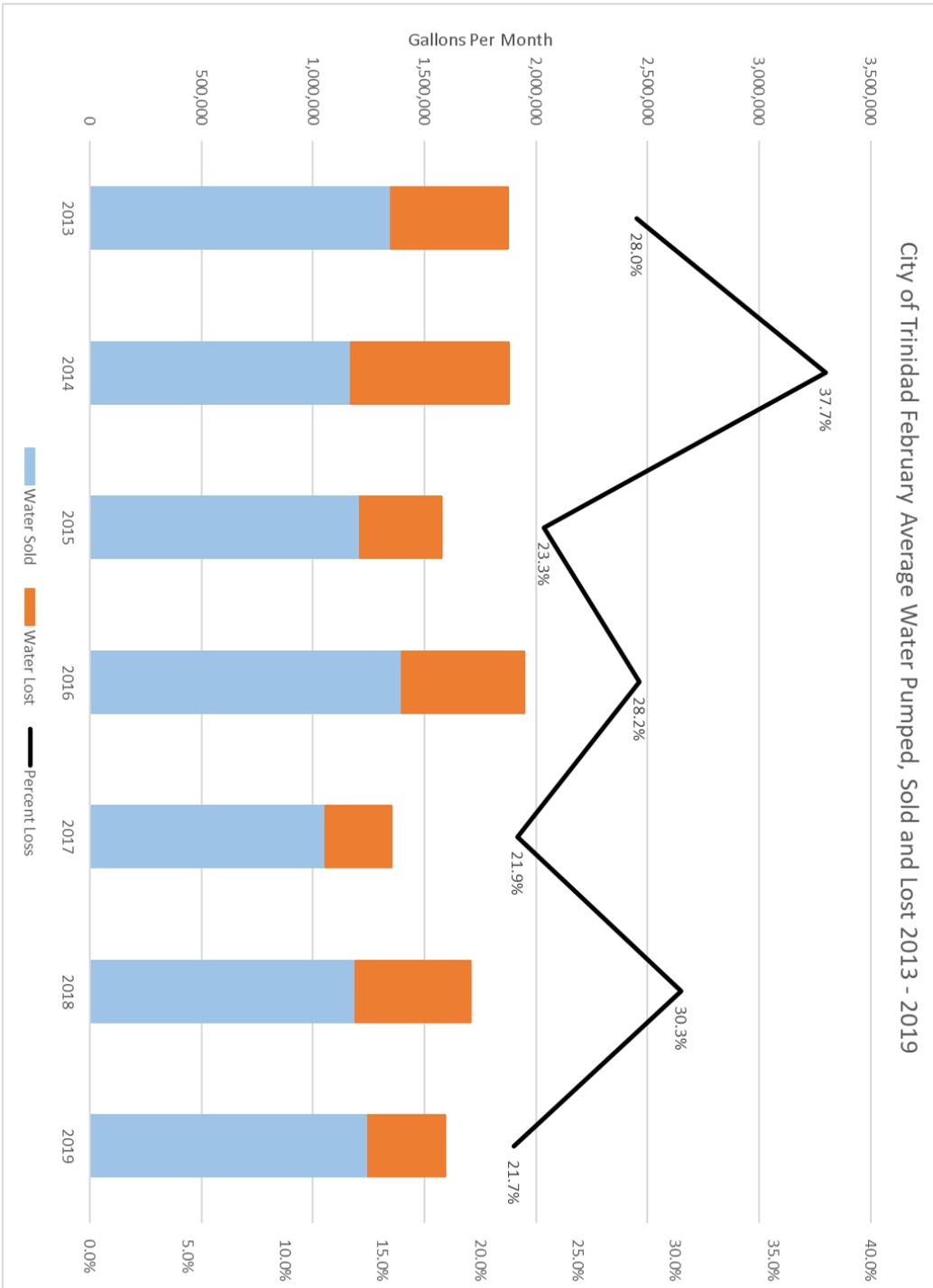


Figure A-3 Monthly Water Production Rates February 2013 to 2019

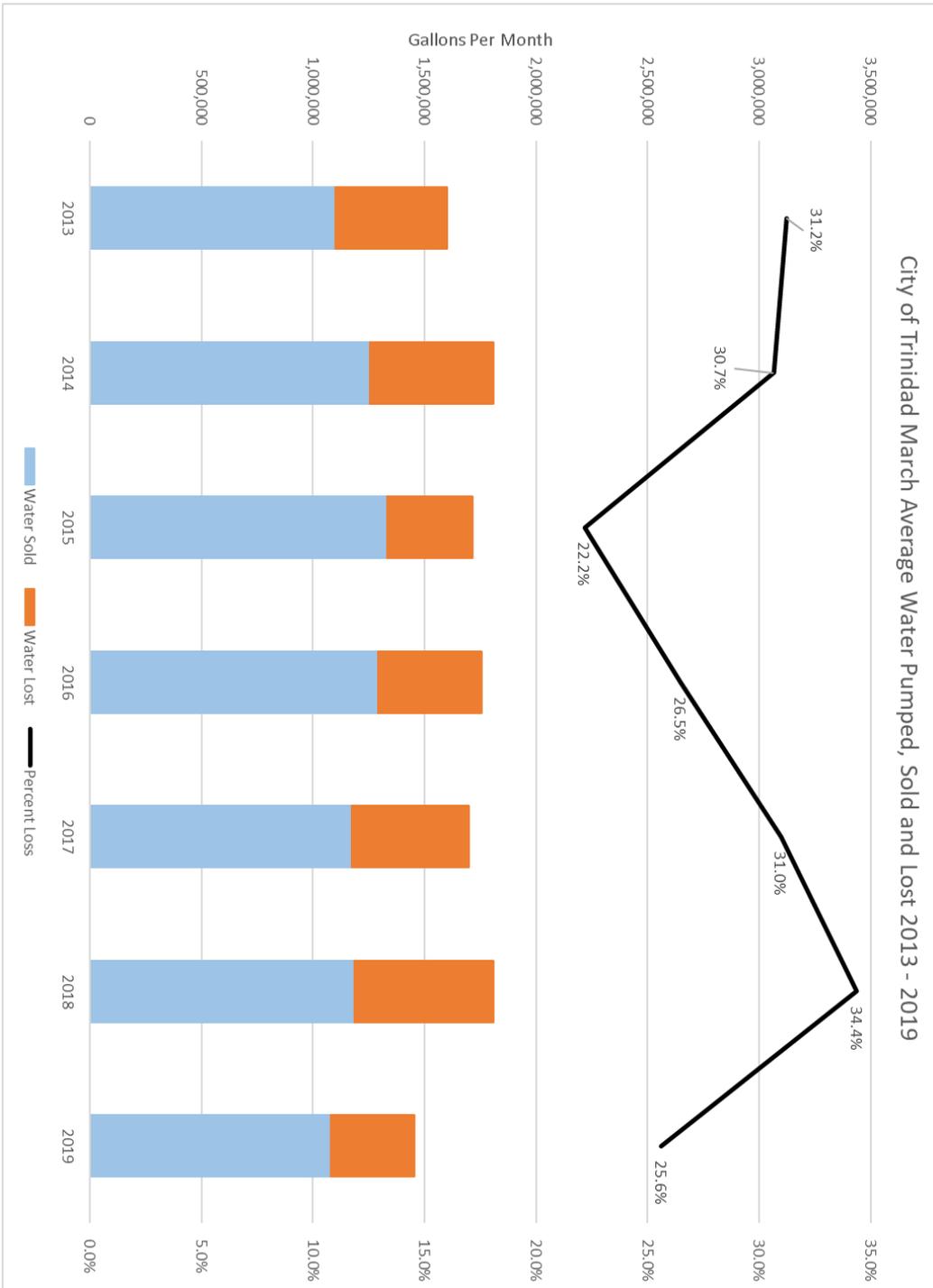


Figure A-4 Monthly Water Production Rates March 2013 to 2019

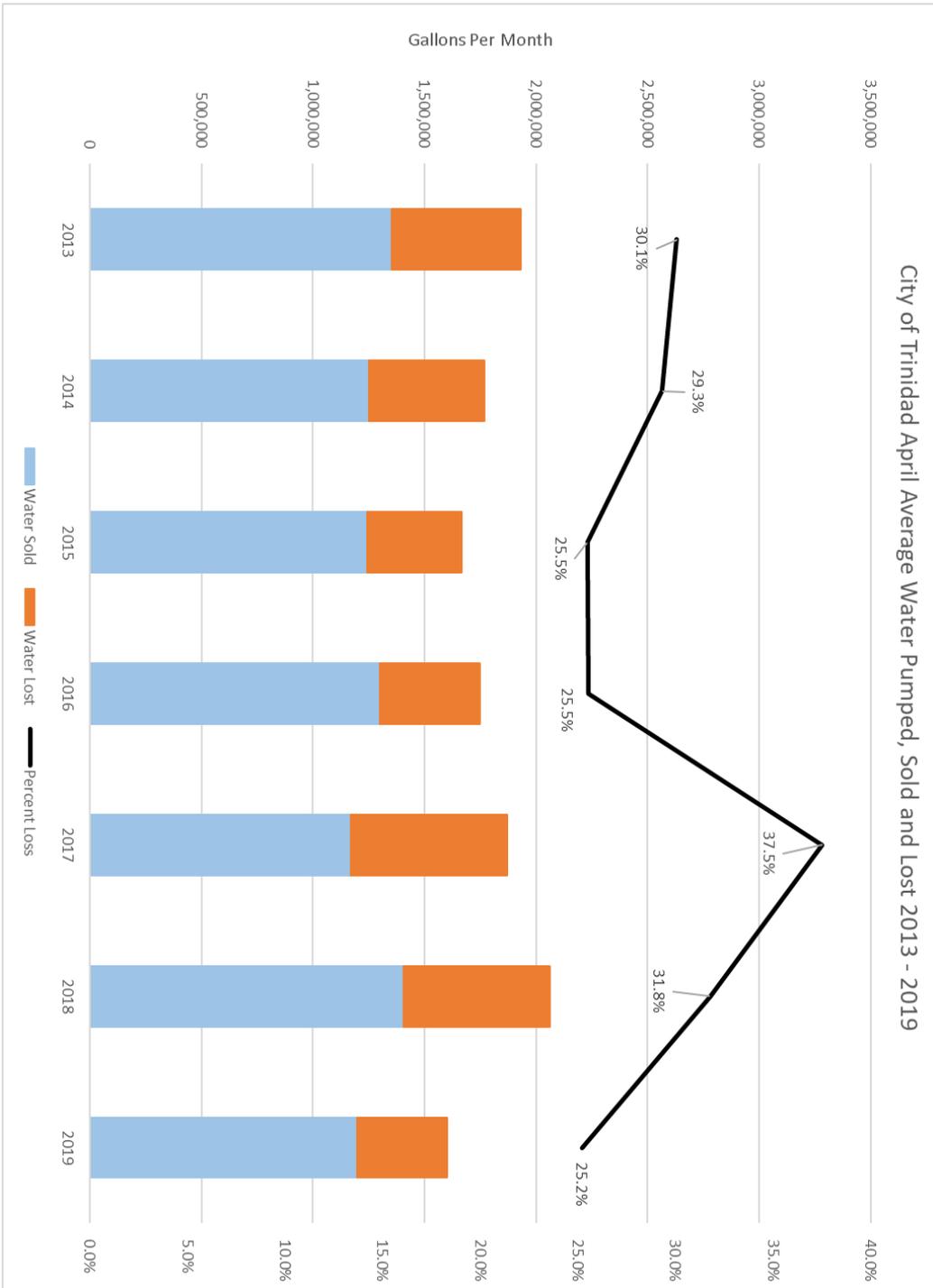


Figure A-5 Monthly Water Production Rates April 2013 to 2019

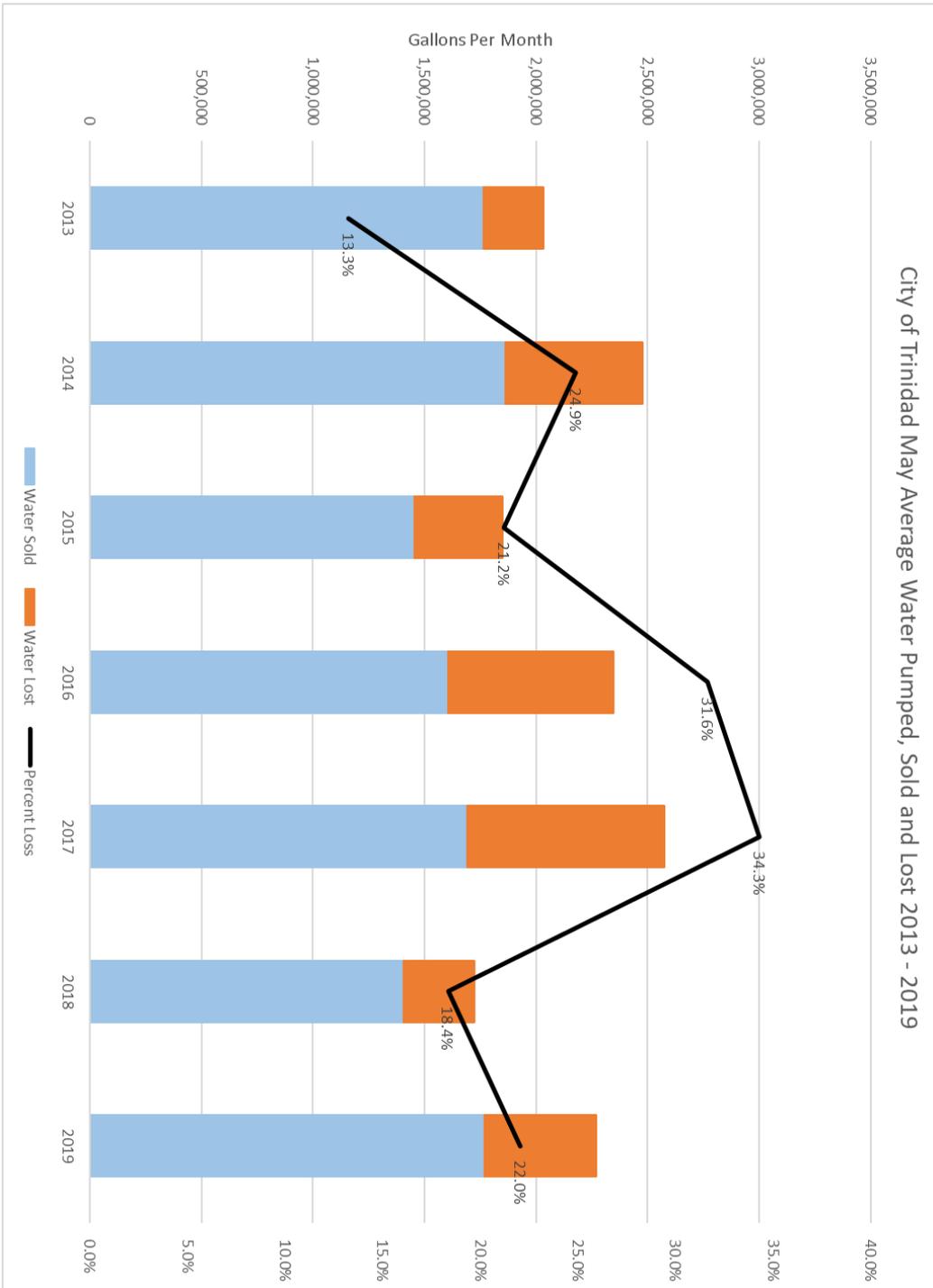


Figure A-6 Monthly Water Production Rates May 2013 to 2019

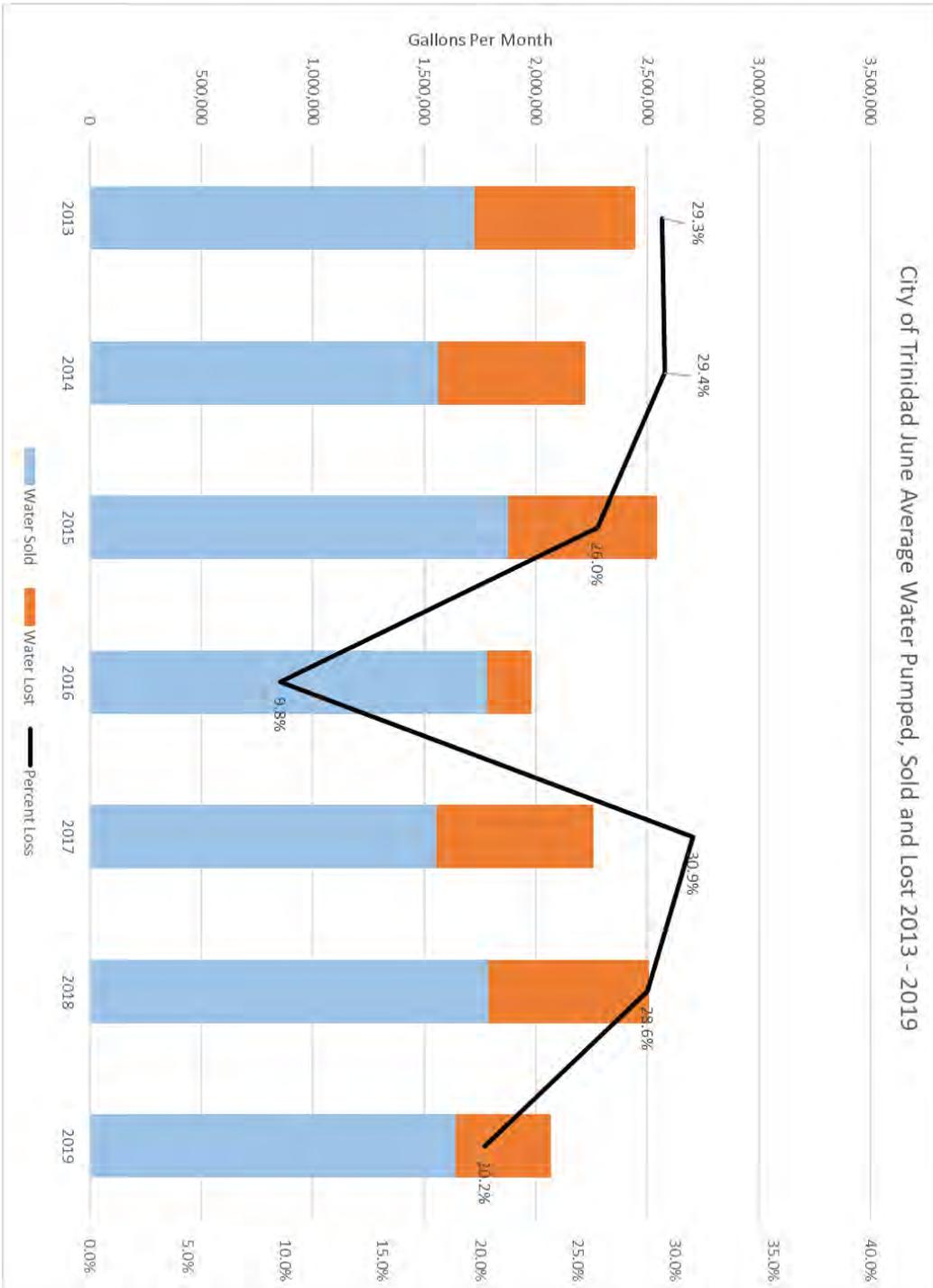


Figure A-7 Monthly Water Production Rates June 2013 to 2019

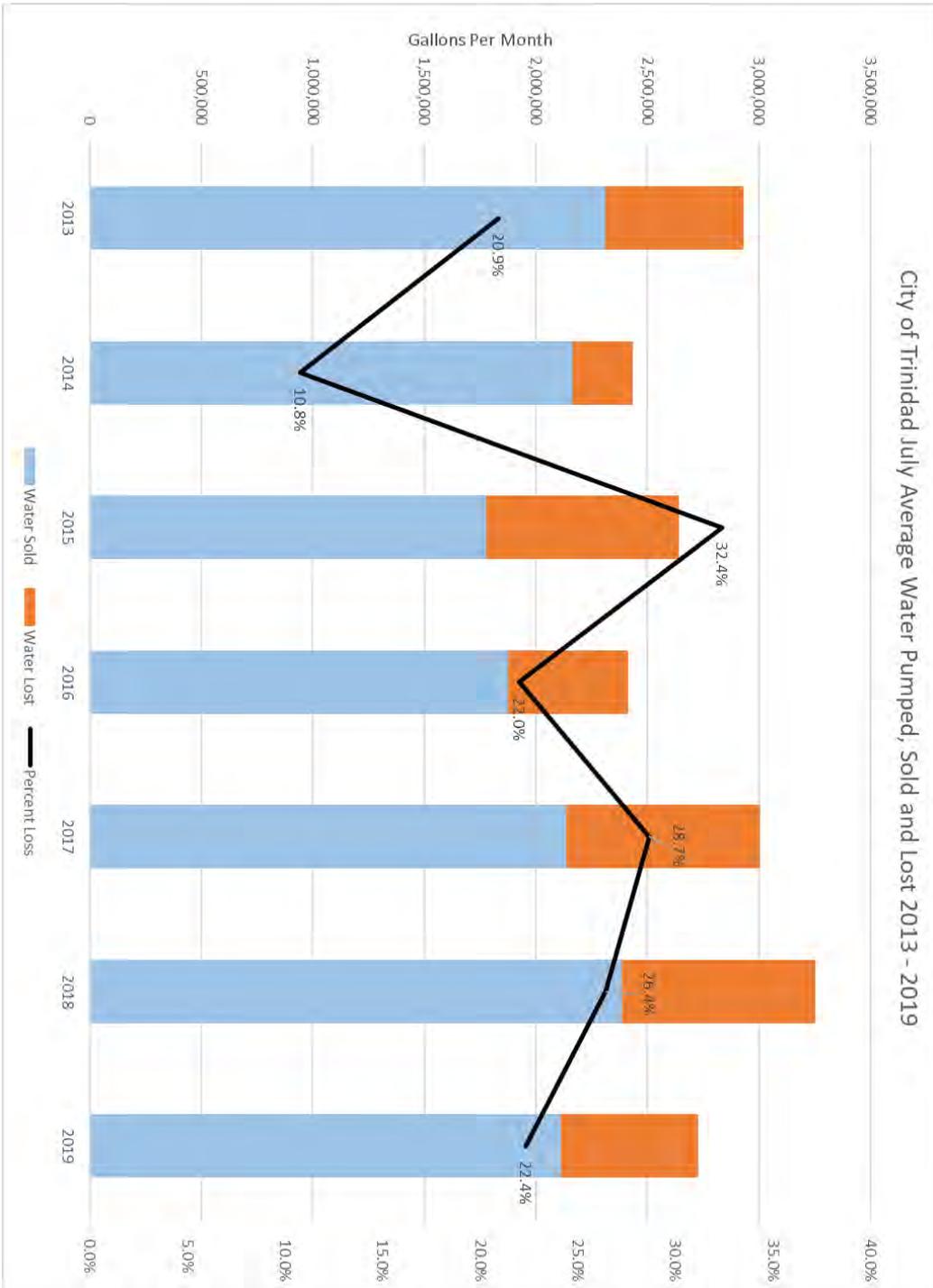


Figure A-8 Monthly Water Production Rates July 2013 to 2019

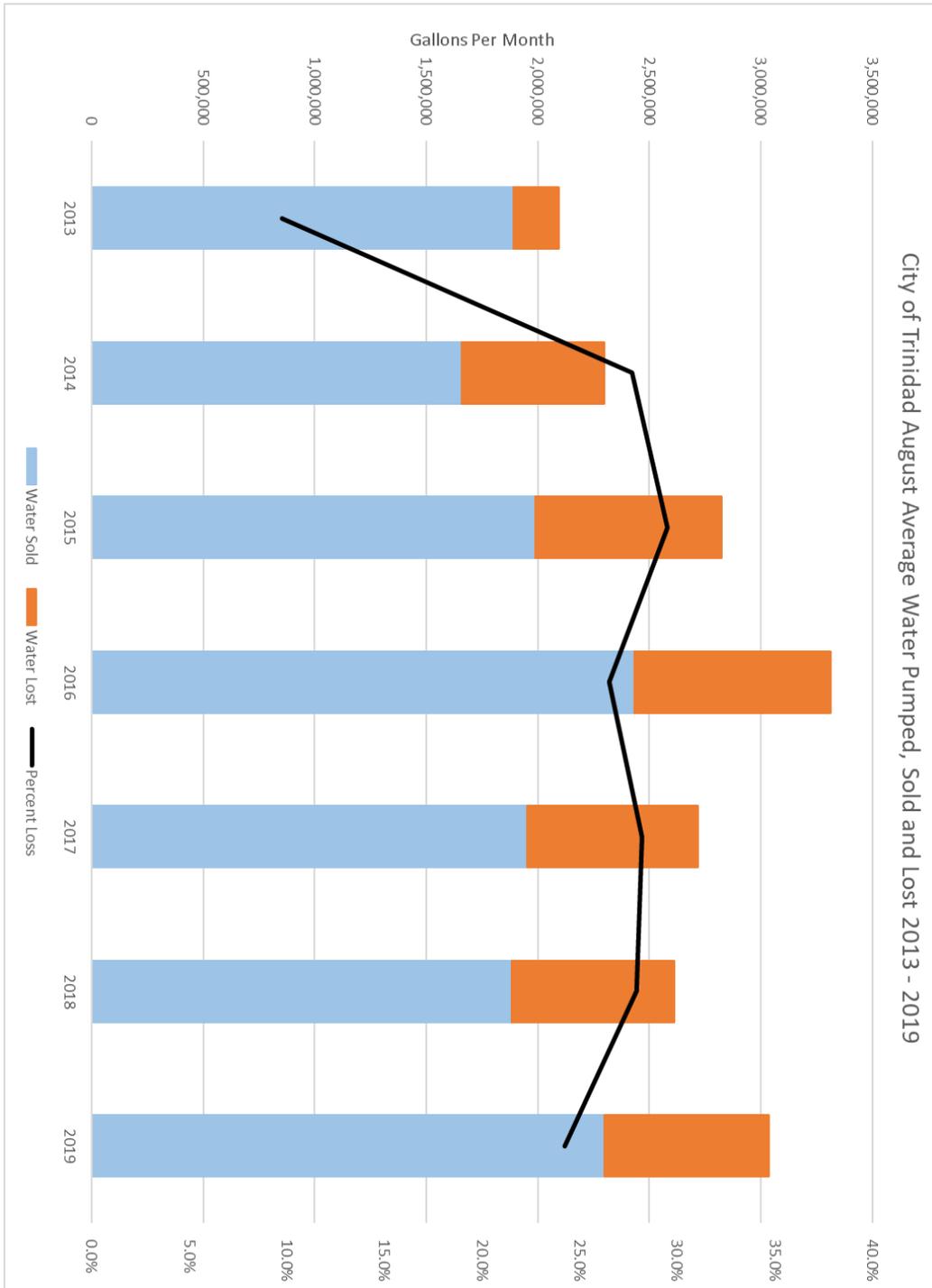


Figure A-9 Monthly Water Production Rates August 2013 to 2019

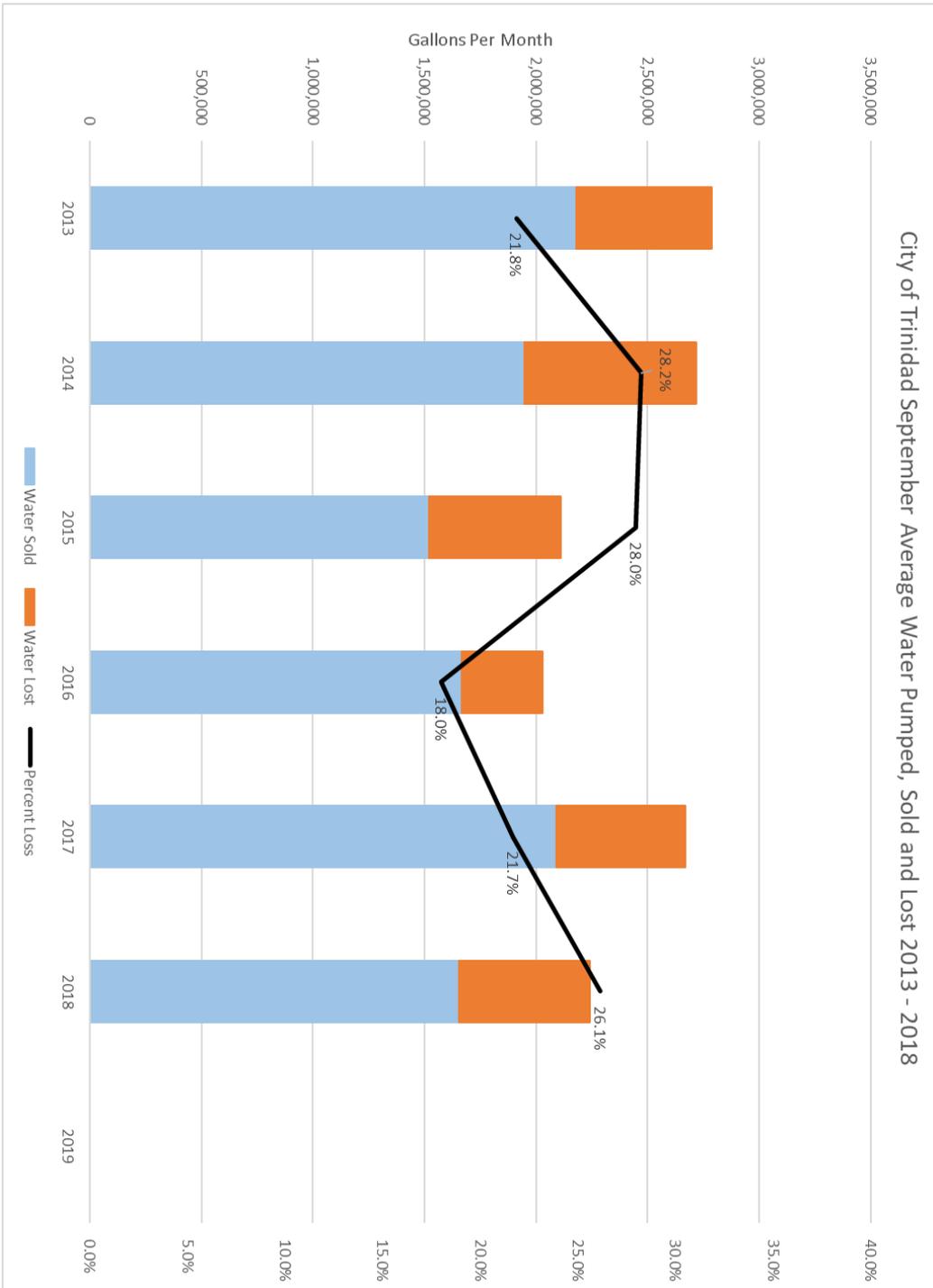


Figure A-10 Monthly Water Production Rates September 2013 to 2018

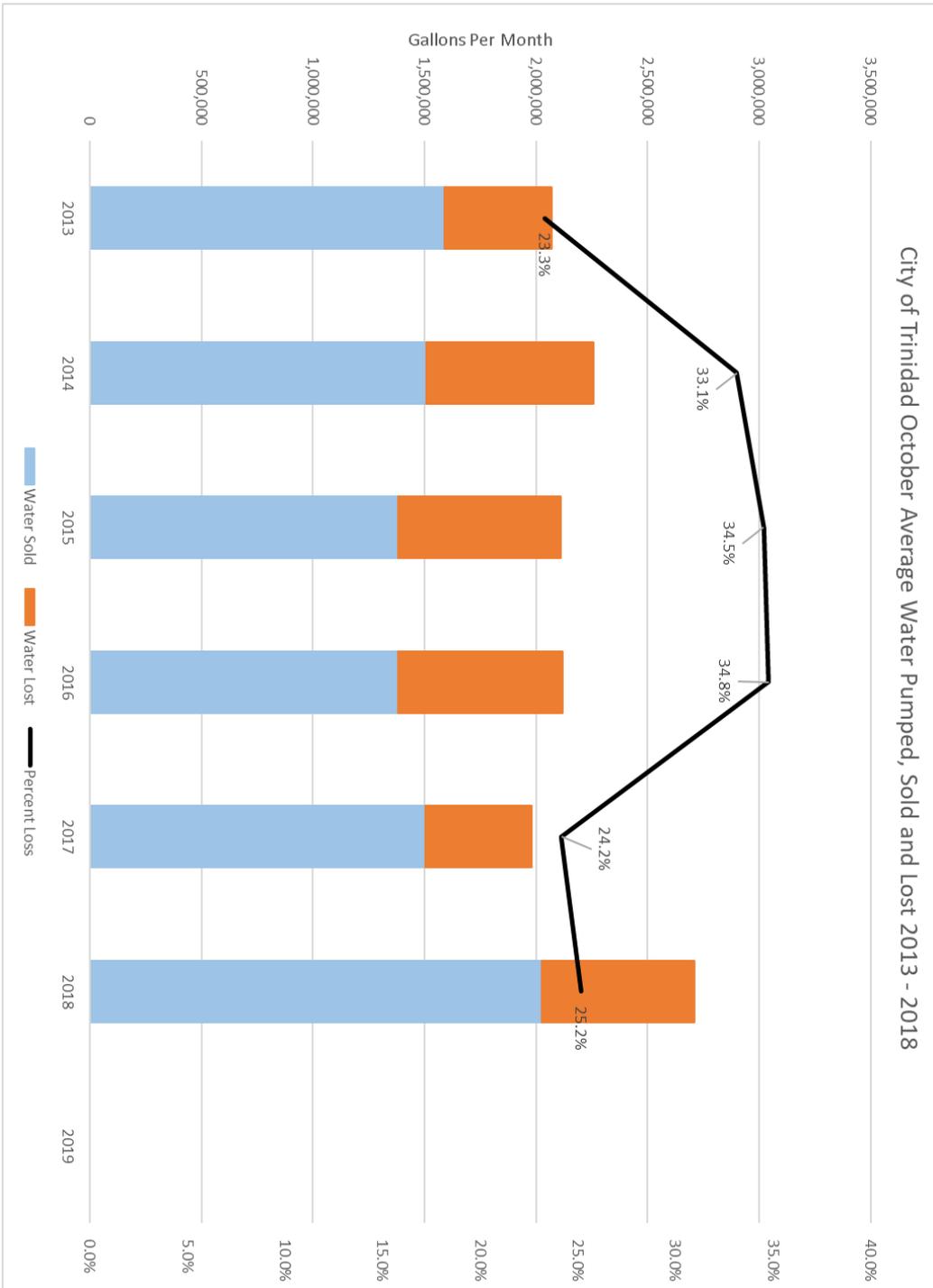


Figure A-11 Monthly Water Production Rates October 2013 to 2018

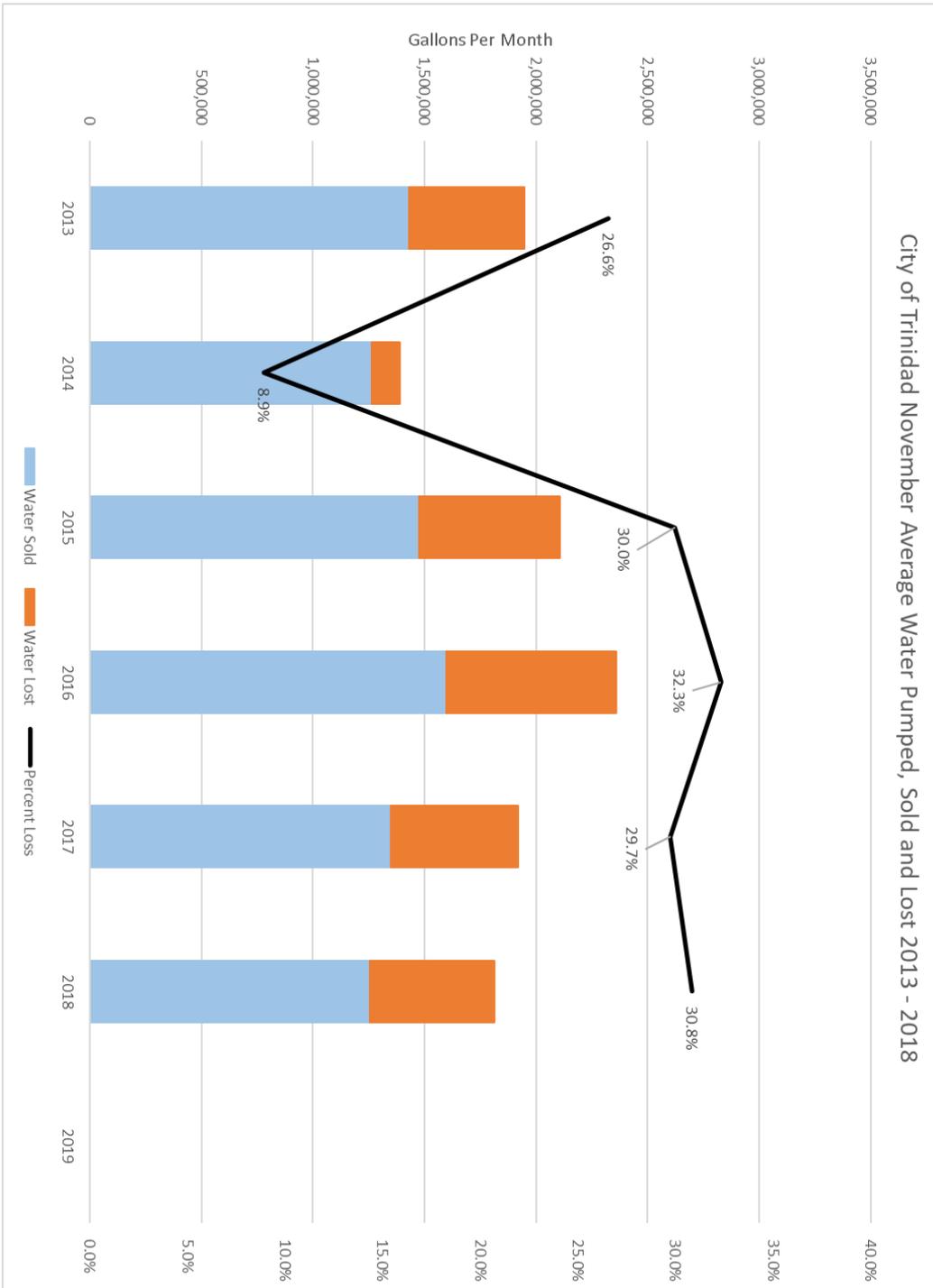


Figure A-12 Monthly Water Production Rates November 2013 to 2018

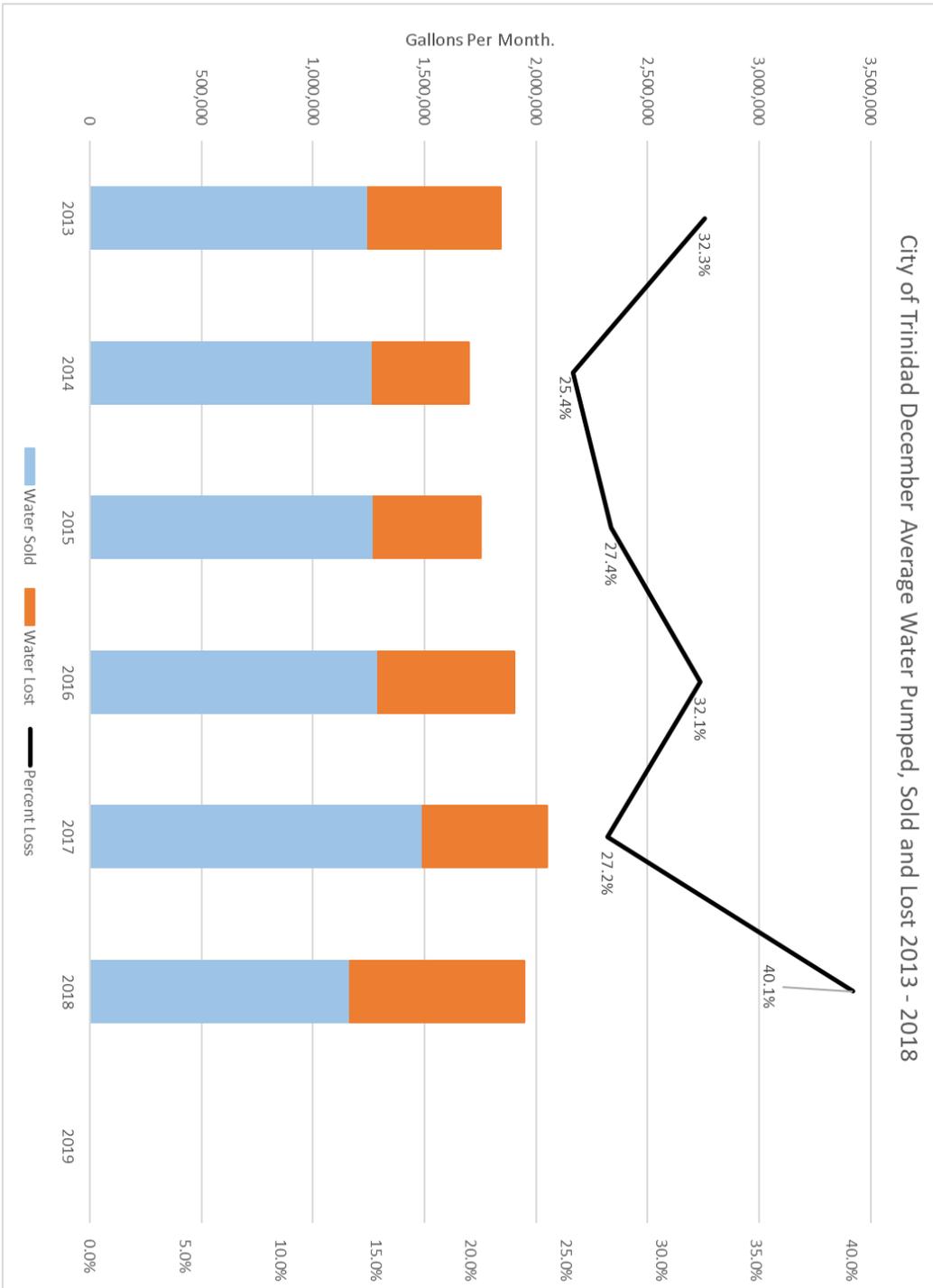


Figure A-13 Monthly Water Production Rates December 2013 to 2018



Appendix A

Table A-1. Water Production Data September 2012 to August 2019

Date	Water Pumped (gallons)	Water Sold (Gallons)	Water Lost (Gallons)	Percent Loss
Sep-12	2,156,400	1,721,200	435,200	20.18%
Oct-12	2,229,861	1,717,901	511,959	22.96%
Nov-12	1,740,724	1,195,522	545,203	31.32%
Dec-12	1,897,531	1,285,834	611,697	32.24%
Jan-13	1,978,336	1,511,918	466,418	23.58%
Feb-13	1,875,927	1,349,965	525,963	28.04%
Mar-13	1,601,811	1,101,536	500,275	31.23%
Apr-13	1,933,034	1,351,760	581,274	30.07%
May-13	2,032,944	1,763,353	269,590	13.26%
Jun-13	2,443,168	1,726,205	716,963	29.35%
Jul-13	2,927,000	2,314,114	612,886	20.94%
Aug-13	2,096,543	1,891,958	204,585	9.76%
Sep-13	2,788,297	2,179,105	609,191	21.85%
Oct-13	2,070,743	1,588,122	482,621	23.31%
Nov-13	1,949,132	1,431,128	518,004	26.58%
Dec-13	1,840,732	1,246,352	594,380	32.29%
Jan-14	1,656,217	1,322,556	333,661	20.15%
Feb-14	1,877,229	1,169,400	707,829	37.71%
Mar-14	1,810,323	1,255,209	555,114	30.66%
Apr-14	1,769,225	1,250,040	519,185	29.35%
May-14	2,479,373	1,862,358	617,016	24.89%
Jun-14	2,219,051	1,565,561	653,491	29.45%
Jul-14	2,429,269	2,167,189	262,080	10.79%
Aug-14	2,296,961	1,660,354	636,607	27.72%
Sep-14	2,717,793	1,950,164	767,629	28.24%
Oct-14	2,258,661	1,509,973	748,688	33.15%
Nov-14	1,388,998	1,265,203	123,795	8.91%
Dec-14	1,698,115	1,267,200	430,915	25.38%
Jan-15	1,449,702	1,182,648	267,055	18.42%
Feb-15	1,576,707	1,209,839	366,867	23.27%
Mar-15	1,714,318	1,334,166	380,153	22.18%
Apr-15	1,668,119	1,242,836	425,283	25.49%
May-15	1,849,431	1,456,951	392,480	21.22%



Date	Water Pumped (gallons)	Water Sold (Gallons)	Water Lost (Gallons)	Percent Loss
Jun-15	2,538,275	1,877,842	660,433	26.02%
Jul-15	2,636,382	1,782,503	853,879	32.39%
Aug-15	2,824,697	1,991,038	833,659	29.51%
Sep-15	2,111,646	1,521,321	590,325	27.96%
Oct-15	2,110,045	1,381,465	728,580	34.53%
Nov-15	2,106,447	1,475,024	631,423	29.98%
Dec-15	1,753,726	1,273,461	480,264	27.39%
Jan-16	1,420,775	1,040,922	379,853	26.74%
Feb-16	1,949,035	1,400,084	548,950	28.17%
Mar-16	1,755,424	1,290,539	464,884	26.48%
Apr-16	1,748,123	1,301,543	446,580	25.55%
May-16	2,349,265	1,605,761	743,504	31.65%
Jun-16	1,978,037	1,784,545	193,491	9.78%
Jul-16	2,407,665	1,877,700	529,965	22.01%
Aug-16	3,314,731	2,434,805	879,926	26.55%
Sep-16	2,031,335	1,665,478	365,857	18.01%
Oct-16	2,120,944	1,383,096	737,849	34.79%
Nov-16	2,361,862	1,598,325	763,537	32.33%
Dec-16	1,901,930	1,291,991	609,939	32.07%
Jan-17	1,890,634	1,319,541	571,093	30.21%
Feb-17	1,354,490	1,057,701	296,790	21.91%
Mar-17	1,698,265	1,172,183	526,083	30.98%
Apr-17	1,870,871	1,168,779	702,092	37.53%
May-17	2,574,481	1,690,919	883,562	34.32%
Jun-17	2,253,252	1,556,838	696,414	30.91%
Jul-17	2,999,509	2,139,743	859,766	28.66%
Aug-17	2,719,491	1,952,326	767,165	28.21%
Sep-17	2,669,289	2,090,027	579,262	21.70%
Oct-17	1,982,241	1,503,053	479,187	24.17%
Nov-17	1,919,958	1,348,887	571,070	29.74%
Dec-17	2,048,316	1,491,137	557,179	27.20%
Jan-18	1,645,812	1,186,523	459,289	27.91%
Feb-18	1,707,421	1,190,166	517,256	30.29%
Mar-18	1,808,722	1,187,173	621,549	34.36%



Date	Water Pumped (gallons)	Water Sold (Gallons)	Water Lost (Gallons)	Percent Loss
Apr-18	2,060,943	1,405,874	655,069	31.78%
May-18	1,723,497	1,407,131	316,366	18.36%
Jun-18	2,504,097	1,787,919	716,178	28.60%
Jul-18	3,246,523	2,387,984	858,539	26.44%
Aug-18	2,611,382	1,882,024	729,358	27.93%
Sep-18	2,240,752	1,655,080	585,672	26.14%
Oct-18	2,708,786	2,026,458	682,328	25.19%
Nov-18	1,812,627	1,253,503	559,124	30.85%
Dec-18	1,946,738	1,166,587	780,151	40.07%
Jan-19	1,564,109	1,129,925	434,184	27.76%
Feb-19	1,592,012	1,245,993	346,019	21.73%
Mar-19	1,454,303	1,081,713	372,590	25.62%
Apr-19	1,602,814	1,198,267	404,547	25.24%
May-19	2,268,857	1,768,724	500,133	22.04%
Jun-19	2,060,741	1,643,949	416,792	20.23%
Jul-19	2,722,288	2,113,636	608,653	22.36%
Aug-19	3,036,111	2,300,260	735,851	24.24%



Memorandum

October 2, 2019

To:	Eli Naffah, City Manager	Ref. No.:	11198797
From:	Patrick Sullivan, Steve Allen	Tel:	7074438326
Subject: City of Trinidad alternative raw water source evaluation			

The City of Trinidad serves treated water to approximately 1,000 people within the City service area. Currently, Luffenholtz Creek is the only source of raw water utilized by the City. The City's diversion and water plant is located at 1313 Westhaven Dr. Trinidad CA, adjacent to Luffenholtz Creek. Water for the plant is pumped from a wet well that is filled through an infiltration gallery located approximately 10 feet below the creek bed. The City's water right on Luffenholtz Creek specifies the rate of diversion, the annual maximum diversion, and required bypass flow requirements. The bypass flow requirement is the minimum flow rate that must be allowed to bypass the water intake. In addition to water right limitations, the effective water production rates are currently limited by physical constraints in the processing of the water. While the City's current water demand and production rates are far below their existing water rights limits, there may be other limitations to water production that inhibit the City's ability to continually meet the existing and future water demands. These include: water intake system limitations, production capacity of the existing water treatment facility, capacity of the storage and conveyance system, or limited availability of raw water within the Luffenholtz Creek.

An assessment of the treatment plant was previously performed and presented in a technical memorandum, Water Treatment Plant Production Rate Test and Analysis (GHD, May 2019). An assessment of the limitations of the Luffenholtz Creek watershed is presented and discussed in a technical memorandum, City of Trinidad Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed (GHD, September 2019).

In the event that there is insufficient raw water supply within the Luffenholtz Creek watershed, the City will need to augment the water supply from other sources. The purpose of this memorandum is to identify and evaluate potential alternative water sources for the City. These alternative sources of raw water evaluated in this memo include:

- Recycled/reclaimed water
- Desalination
- Rainwater catchments
- Spring catchment
- Other creeks, such as Mill and Parker Creek
- Humboldt Bay Municipal Water District



Recycled or Reclaimed Water

Recycled water is highly treated sewage wastewater, industrial wastewater, and storm water runoff. The recycled water is treated to a high degree through filtering and processing to remove solids and impurities and is disinfected prior to use. Many municipalities utilize recycled or reclaimed water to augment their water supply. In some cases recycled water accounts for more than 20% of the total demand.

The treatment of the recycled water occurs at a wastewater treatment facility. The recycled water treatment facility requires a high level of treatment and filtration which typically have higher capital and operational costs.

Recycled water often has higher levels of total dissolved salts and nutrients. This limits the use of the water to landscape irrigation and some industrial uses. In some cases recycled water is used to recharge groundwater that is later pumped out for domestic use.

For the City of Trinidad, the use of recycled water has several limitations. The main factor is that the City does not currently have a centralized sewer collection and treatment system. Recycled water is not potable (not for human consumption) and would require a separate delivery system.

Desalination

Desalination is the process of removing salts and minerals from sea water to create potable drinking water. There are several methods for the process of desalination that entail a distillation or membrane filter process. All of these processes require sophisticated equipment and are very energy intensive. The process would require an ocean intake for the raw sea water and an outfall for the highly saline brine that is created as byproduct of the process.

While desalination is technically possible, it is not currently a viable option for the City due to the high capital and operational costs, intake and outfall permitting, and potential environmental concerns from the brine outfall.

Rainwater Catchments

Rainwater collection systems capture rainwater runoff from impervious areas such as roofs, patios, streets and driveways and convey it to storage tanks or cisterns. These types of systems vary in size and complexity and could range from a simple rain barrel to large filtration and storage tanks. Typically, rainwater is not considered potable without some kind of filtration and disinfection. The most common use of captured rainwater is landscape irrigation as it does not require filtration and disinfection. Some of the benefits of rainwater catchment is that Trinidad gets plenty of rain and it is a simple technique that only requires a water tank (barrel) to be connected to the roof down spouts. Without installing large storage tanks on every property in Trinidad, the impact of rainwater catchment would be limited. With approximately 1000 residents, if every person had a 55 gallon rain barrel that would account for about one days' worth of the City's water production. The 55 gallon rain barrels are not very cost effective and would not provide significant benefits other than public education. However, encouraging installation of larger tanks, where appropriate, for outdoor watering and firefighting water could provide more significant and cost effective water storage. If 100 landowners installing 2500 gallon tanks (similar to a large septic tank) storage would increase by



250,000 gallons. This water could be used for irrigation of landscaping but would not be available to the potable water system. Homeowners with pumped rain water catchment systems would need to install backflow prevention devices in order to comply with water distribution system regulations. This also means that the water would not be available to the City's potable water system, which includes the firefighting water supply. While rainwater catchment is encouraged throughout the City as a conservation measure it will have very limited benefit to the water supply needs.

Springs Catchment in the Trinidad Area

The use of a distributed network of a collection system using natural springs located in the Trinidad area is a potential water source for the City. This possibility has been proposed on multiple occasions by Steve Madrone who is the 5th District supervisor. The basic idea would be to construct a collection and treatment system close to multiple springs, which would then convey the drinking water via separate pipelines for distribution. Alternatively, the water could be conveyed to the City's existing treatment plant.

The prime benefit of this alternative system is the avoidance of higher turbidity levels, which can be found in both Mill and Luffenholtz creeks (Madrone, 2011). Collecting and treating water with lower turbidity levels would decrease the total amount of treatment necessary to meet the regulations set forth by the EPA. Additionally, multiple conveyance systems could be strategically placed to efficiently distribute water to the community.

Some of the concerns with this design would be the potential increase in maintenance, access to spring locations (permitting, right-of-way, easements, etc.), and water conveyance. There could be an increase in necessary maintenance due to multiple collection and treatment locations, which would all require scheduled preventative maintenance as well as any necessary repairs. The spring locations need to be further studied and evaluated but they could potentially require permitting and/or easements to access and then develop a water collection and conveyance system.

The water quality of the springs would need to be regularly monitored. As with the existing system on Luffenholtz Creek, springs are susceptible to influences for surface usage and runoff. Water quality and treatment needs to be continually monitored during production. Using multiple springs would require more monitoring effort than is currently being done at existing treatment facility.

The springs in the Luffenholtz and Mill Creek watersheds supply a portion of the water flowing in Luffenholtz and Mill creeks. The proposed distributed collection system would be gathering the same water further upstream than the current collection location, essentially collecting water that would be going to the existing water treatment facility. The hydrology of the creeks would need to be evaluated under the assumption that water collection locations would be further upstream; to determine the impact this could have on the creeks.

A water collection, treatment, and conveyance system could be developed utilizing the springs in Trinidad. The primary advantages of a distributed spring collection system are 'cleaner' source water and potentially more raw water availability due to water from multiple drainages. The amount of additional water would require more study and further data collection in the subject watersheds. Some of the limitations to a distributed spring collection system are: the effort needed to obtain legal water rights to the spring, the costs to install new treatment and conveyance infrastructure (either at the point of the spring capture or



conveyance piping from the spring to the existing treatment plant), increased monitoring and maintenance requirements. Additionally, a distributed spring collection system would be subject to the same vulnerabilities of drought and influences of other water users within the drainage, as presented in City of Trinidad Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed (GHD, September 2019).

Other Creeks

There are three other creeks, Parker Creek, McMconnahs Creek and Mill Creek, in the Trinidad area that could potentially serve as sources of raw water for the City. There is very limited available flow data on these creeks and the use of these creeks as a supplemental water source would require more study and further data collection in the subject watersheds.

The City currently has a water right on Mill Creek that allows for a 40.4 gallons per minute extraction rate and maximum of 21.244 million gallons per year. The City is not currently exercising this water right. Parker Creek frequently has no measurable flow and there are no known existing water rights on this creek. McMconnahs Creek has eight water rights and Mill Creek has nine water rights, including the City's. As with Luffenholtz Creek, the water right does not mean that there is water available in these creeks.

Utilizing either McMconnahs Creek or Mill Creek would require the construction of new diversions on the creeks. They would likely be similar to extraction/diversion of the existing facility on Luffenholtz Creek. After extraction the raw water would either need to be pumped to the City's Luffenholtz treatment plant or new treatment and disinfection facilities would need to be constructed. Construction of new facilities would entail acquiring land and access to the sites as well as new pipes for a conveyance of the water. Permitting requirements for the diversions would require significant effort and may be within the coastal zone.

Utilizing these creeks for an additional raw water source would be subject to the same vulnerabilities of drought and influences of other water users within the drainage, as presented in City of Trinidad Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed (GHD, September 2019).

Humboldt Bay Municipal Water District Technical Feasibility

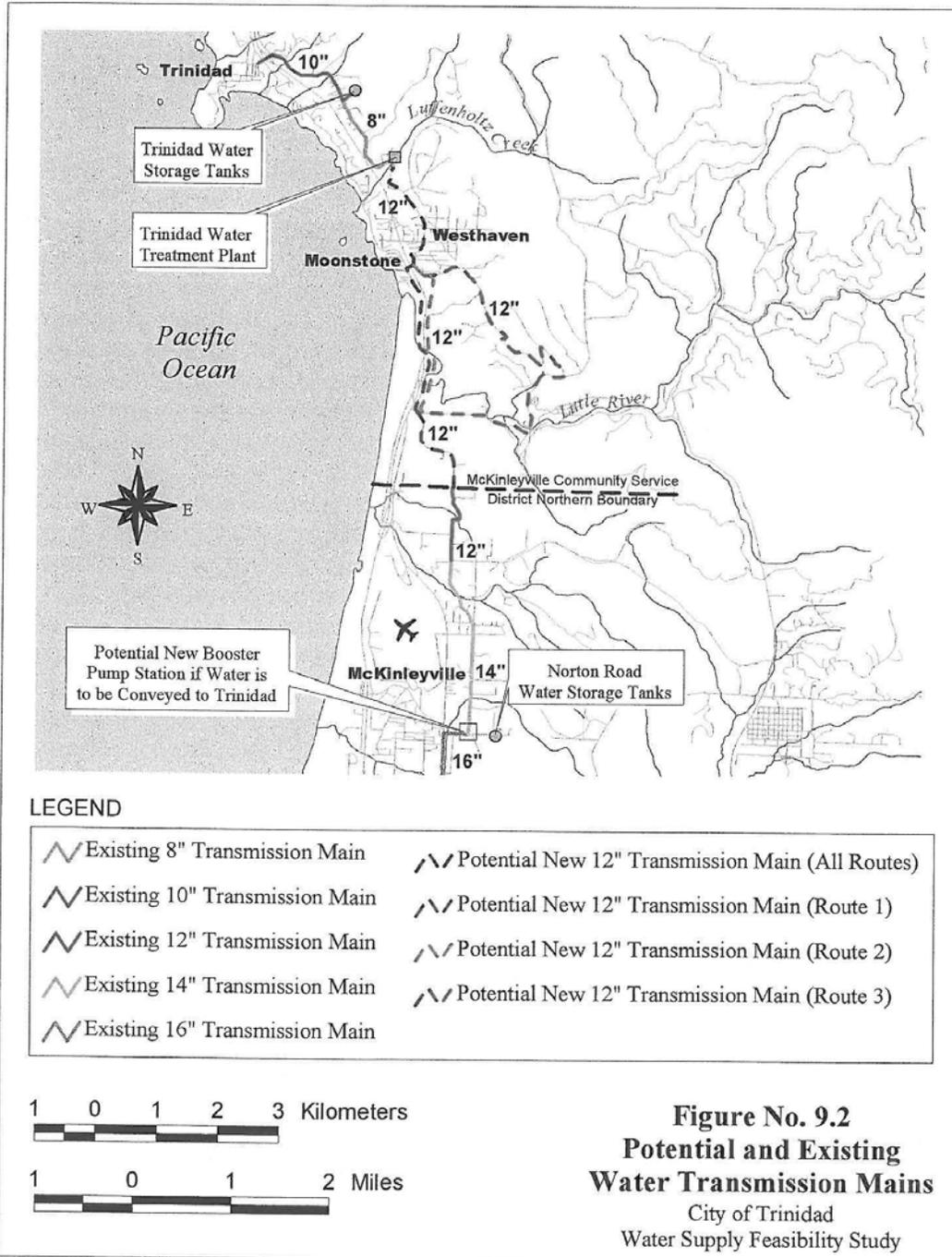
The concept of connecting the City of Trinidad to the HBMWD has been considered numerous times over the past 50 years. The idea is simple and would require extending the HBMWD system north, connecting it to the existing Trinidad water system (McHaney, 2001, pg. 2). The HBMWD currently serves water to roughly 80,000 people from Ranney wells located in the Mad River. The Mad River has a reliable source of water because it originates from Ruth Lake, which is a 48,000 acre-foot reservoir (McHaney, 2001, pg. 3). In order for water from the HBMWD to reach the City of Trinidad, the McKinleyville Community Services District (MCSD) system would need to be utilized.

The MCSD water system was constructed with this possibility in mind and would be able to handle the increased water capacity. The water system starts at the Grant A. Ramey pump station and winds through McKinleyville until it terminates with a 12-inch pipe on Dows Prairie Road. Homes served by the MCSD system, east of the end of the line on Dows Prairie Road experience low water pressure. This is indicative of the need for an addition pump station if the distribution system is extended (McHaney, 2001, pg. 4). The MCSD has considered extending the Dows Prairie Road main further to connect with more customers, which would require the installation of a new booster pump station and possibly a new storage reservoir. The



installation of a new pump station and reservoir would provide the infrastructure necessary to reach the City of Trinidad water system.

The City of Trinidad water system starts at their water treatment plant on Luffenholtz Creek near Westhaven Drive. The most logical approach to connecting the HBMWD to the City of Trinidad would be to construct a pipeline from the MCSD's Dows Prairie main to the Trinidad Water Treatment Plant, where it would connect to the existing system, shown in Figure 1. This approach would require the implementation of a new booster pump station as mentioned before, as well as the design and construction of a new pipeline.



00-1063-05009
November 2001

9-6

WINZLER & KELLY
CONSULTING ENGINEERS

Figure 1: Proposed pipeline routes to connect MCSDD water system to the City of Trinidad water system.



A 1967 report, conducted for the HBMWD, investigated possible alignments for the construction of a pipeline from Arcata to Trinidad. The report included three alternatives and chose route one as being the most logical of the three. The chosen route would follow county roads from the end of the MCSD system to Little River, where the pipeline would cross the West side of Highway 101 and then continue north to Scenic Drive and then along Westhaven Drive to the Trinidad Water Treatment Plant (HBMWD, 1967). This possible alignment could be developed in the Humboldt County, Highway 101, and PG&E right-of-ways, or new easements could be obtained. A cost estimate was included in the 1967 report and estimated a total cost of \$1,940,000, which is broken down in Table 1.1 in the Appendix.

For the City of Trinidad to receive water from the HBMWD, they would have to coordinate with many agencies including HBMWD, MCSD, the Local Agency Formation Commission (LAFCO), Humboldt County, Coastal Commission, and Caltrans (McHaney, 2001, pg. 10). A pipeline from the MCSD's main on Dows Prairie Road to the start of the Trinidad system on Luffenholtz Creek could be constructed. Details regarding the alignment of the new pipeline, right-of-way issues, and modifications to the MCSD pumping capacity would need to be resolved to provide proper operation.

Conclusion

As the City evaluates the viability of the Luffenholtz Creek watershed to continually provide potable water to existing customers and assesses additional service requests it may become necessary to augment the raw water supply to the system. This memorandum summarized several alternatives for raw water sources available to the City, including: recycled/reclaimed water, desalination, rainwater catchment, spring catchment, other creeks near Trinidad (Mill, Parker, and McMconnahs Creek), and connecting to Humboldt Bay Municipal Water District. The advantages and limitations of each was discussed.

Water sources such as recycled water and desalinization may be technically feasible, but the required infrastructure and operational costs could be prohibitively high, thus rendering them infeasible.

Rainwater catchment is an option that should be encouraged throughout the City as a best management practice. Using the stored rainwater to irrigate landscaping will decrease the demand on the potable water system. However, when the amount of rainwater stored and used for irrigation is compared to the total amount of water the City produces the overall impact on system demand is minimal. Rainwater catchment will also help the City achieve the ASBS stormwater runoff prohibition.

The use of springs throughout the Trinidad area or utilizing other creeks has potential to meet the City's water needs with the continued use of Luffenholtz Creek. Both approaches would require additional studies and significant investment in infrastructure, land acquisition, permitting, operational and maintenance costs.

Purchasing water from HBMWD is a feasible option that would meet the City's current and future water needs. Some of the drawbacks of this alternative are that it would require significant investment in permitting and installing a conveyance pipeline from McKinleyville to the City's system. Purchasing water from HBMWD would mean making a regular payment to HBMWD which may have an influence on the current rate system. Some of the advantages to this alternative are the availability of potable water and the reliability of the water supply and resilience to drought and climate change. HBMWD raw water comes from the Mad River



watershed. With a much larger watershed area and storage reservoir (Ruth Lake), the supply of water is much less vulnerable to the challenges of drought conditions and climate change.

References

GHD (2019) *'City of Trinidad Conceptual Hydrological Assessment of the Luffenholtz Creek Watershed'*, GHD Eureka, CA
HBMWD (1967). *'Report Concerning Mckinleyville – Trinidad Area Water Service'*,

Humboldt Bay

Municipal Water District, Eureka, CA.

Madrone, S.S. (2011). *'Fine sediment sources in coastal watersheds with uplifted marine terraces in Northwest Humboldt County, California'*, Humboldt State University, Arcata, CA.

W&K (2001). *'City of Trinidad Water Supply Feasibility Study'*, Winzler & Kelly, Eureka, CA.



Appendix

Table 1.1 Pipeline Route One Cost Estimate Prepared in 1967
(HBMWD)

Item	Payment Type	Cost (\$)
Tap existing 27", valve, box, meter	lump sum	7,000.00
9,000'-24" Arcata bottom	\$23.00 / l.f.	207,000.00
Bridge Crossing (U.S. 101) (500')	lump sum	10,000.00
16,000'-24" to McKinleyville (R.R Ave.)	\$25.00 / l.f.	400,000.00
2 taps McKinleyville area, valves and vaults	lump sum	12,000.00
18,000'-18" to Dows Prairie	\$16.00 / l.f.	288,000.00
Dows Prairie, tank (elev. 210) (1 MG)	lump sum	100,000.00
10,000'-16" to Crannell Rd	\$13.00 / l.f.	130,000.00
Bridge Crossing (Little River & 101) (400')	lump sum	8,000.00
12,000'-14" to Moonstone	\$10.50 / l.f.	126,000.00
2 taps Crannell & Moonstone	lump sum	10,000.00
Booster Station, Moonstone (3 pump, 1000 GPM & 2 MG)	lump sum	60,000.00
16,500'-12" to Trinidad	\$9.00 / l.f.	148,500.00
Trinidad Meter, tap and vault	lump sum	4,000.00
Trinidad Tank (elev. 400) (0.5 MG)	lump sum	60,000.00
	SUBTOTAL	1,570,000.00
	5% Contingency	79,500.00
		1,650,000.00
Land & R.O.W. & Appraisals	lump sum	30,000.00
Legal 2% (including bonds)	lump sum	49,500.00
Topography (Aerial) 15 miles x 1000' or 2000A (50, scale)	lump sum	35,500.00
Engr. plans and specs. @ 5.5%	lump sum	90,500.00
Soils & Insp.	lump sum	35,000.00
Constr. Int. Admin & Reserve 2%	lump sum	49,500.00
	SUBTOTAL	290,000.00
	TOTAL COST	1,940,000.00

residential except for some of the Rancheria connections. The Rancheria parcels were reviewed separately for the purposes of calculating average water use. This is because there are connections for commercial and office uses, mixed in with connections serving individual parcels and/or homes.

The service area property characteristics spreadsheet was not merged with the City’s water account spreadsheet, because the intent is to forecast potential future water use. Because owners, family characteristics, landscaping, number of bedrooms, etc. can all change in the future, an average water use is a better predictor than actual current water use.

Overall, average water use within the service area outside the City and Rancheria is substantially lower than residential water use (Table 3) in the City, with an annual average of 94 gpd and 158 gpd in July. Average water use per account on the Rancheria is closer to the City residential account averages, at 144 gpd annually and 172 gpd during July (without the casino). Therefore, all the accounts were averaged, including the Rancheria parcels, but excluding the casino, to use in the calculations for potential build-out demand for the service area outside City limits. This equated to an average of 109 gpd, with a peak of 166 gpd in July (not included in Table 3). See Table 3 for additional information regarding existing water use within the service area and Rancheria, outside City limits.

Table 3. Existing (2018) Water Use Outside City limits

Area	Annual Average Daily Water Use Per Account (gpd)	Annual Average Total Daily Water Use (gpd)	Average Peak (July) Daily Water Use Per Account (gpd)	Average Total Peak (July) Daily Water Use (gpd)
Rancheria (w/out Casino)	144	3,457	172	4,133
Casino	2,644	2,644	2,724 ¹	2,724 ¹
Service Area (not including Rancheria)	94.2	7,156	158	12,000
Water Truck	1,158	1,158	929 ¹	929 ¹
Total		14,328		19,786

1. Peak water use for both the casino and the water truck were actually in October, therefore, would not contribute to the usage in July. Peak (October) usage for the casino and water truck was 6,341 gpd and 2,064 gpd respectively.

For potential ADUs in the service area, a multiplier of 0.25 was used to account for up to a quarter of properties constructing ADUs (not accounting for existing ones) for parcels where a special permit is required and 0.5 where they are allowed by right (another likely overestimate). The same average water demand was used for both primary residences and ADUs, since the average is already low. A multiplier was applied to each parcel based on whether they are already served by City water or not, whether the parcel has subdivision potential and whether an ADU is allowed by right or special permit. A potential average and peak water demand were calculated for each parcel and totaled for the subarea. The full potential for subdivision was included in the water demand calculations, though, as mentioned above, approval of all those subdivisions is unlikely.

For Area C, a different approach was necessary. The potential water demand for this area is difficult to estimate, because different commercial and recreational uses can vary significantly in their water requirements. For example, one parcel contains a mini-storage business, which likely uses very little water. On the other hand, the RV parks use a significant amount of water, particularly in the summer. Restaurants

OWTS. Encourage Humboldt County to participate to the maximum extent possible, though projects within the City boundaries are the first priority. Project goals include determining what areas and which onsite wastewater treatment systems are contributing the most pollution and offering financial incentives or other assistance to help landowners fix problems. Consider the feasibility and desirability of forming a Septic Maintenance District with the County that encompasses the area from Trinidad to Moonstone. (LU-9.6.1)

CIRC-11.3 Ensure that development in the City does not exceed the treatment capacity of the soils and does not contribute to ground or surface water pollution.

5. Water Service

The City of Trinidad operates a municipal water supply system that services the occupied parcels within the City and a number of properties outside City limits. Potable water for the City system is currently supplied from Luffenholtz Creek. The City's water system includes an infiltration gallery, water treatment plant and several storage tanks. The City's water rights, dating from the late 1970's#, allow the City to divert up to 251 gallons per minute (gpm) from the creek, or a little over 361,440 gallons per day (gpd). However, the City's treatment plant ~~only~~currently has the capacity to treat approximately 1054 gpm (but not necessarily 24 hours per day), ~~or equating to approximately 14038,000 gpd.~~ The City also has ~~some an~~ unused water rights on Mill Creek.

The City has a designated water sService aArea (City Service Limit as designated in the previously certified Local Coastal Program (LCP)) that extends well outside of City limits (Figure 14). Prior to about the year 2000, the City provided water to users outside City limits, but within the service area, when requested, without much oversight or decision-making, in order to benefit from the increased revenue. However, around 2000, the policies of the Humboldt County Local Agency Formation Commission (LAFCo) changed, and they no longer allowed service extensions to properties outside the City without annexation into the City, except in cases of emergencies. Therefore, the City stopped connecting users outside City limits. But the dynamics are again changing. During the recent drought, the number of requests for City water from property owners outside of the City increased substantially. In addition, LAFCo has recently relaxed its policy requiring annexation prior to providing water. On the other hand, water supply has also become a more ~~important~~critical issue.

The Trinidad water system is now serving ~~3223~~ near its maximum number of metered connections, ~~at 323 (as of 2011) 221~~ both inside and 101 outside of City limits, including the Trinidad Rancheria. Currently, demand is approximately 2/3 of treatment capacity. The flow rate and quality of water is highly dependent on the weather. In the winter the water can be difficult to treat at times due to the high turbidity, but that is when demand is lower; ~~the current filtration treatment system cannot meet the water quality requirements and occasionally shuts down, resulting in a significant drop in the storage tank levels.~~ Several water treatment issues, including, bacterial contamination, water turbidity and chlorine contact time are important issues that City staff at the treatment

~~plant must constantly balance the City needs to address in the near future. The City continues to monitor and upgrade the water plant as feasible. Recent improvements/~~upgrades improved treatment for turbidity and chlorine contact time to meet current drinking water standards.

To address current water system needs, the City's engineering firm ~~recently~~ completed a ~~Water Treatment Plant Production Rate Test and Analysis (GHD Memo dated May 1, 2019). comprehensive water supply feasibility report in 2003 ("City of Trinidad Proposition 204 Water Supply Feasibility Study" by Winzler and Kelly — September 2003). The City continues to monitor and upgrade the water plant as feasible. Based on that report, which included limited testing and analysis. Some~~ current characteristics of the City's water plant are as follows:

- ~~Turbidity is the primary limiting factor for overall water production. The highest turbidity tends to occur during early season storm events, which is not during the peak demand period of late summer.~~
- ~~Current demand, topping out at an average of 85,000 gpd, can be met with current existing staffing. Increasing production would may necessitate additional staff and other increased costs.~~
- ~~Current storage capacity is limited, and may not meet today's standards for fire protection flows.~~
- ~~Changes in operations at the water plant can have unanticipated impacts on other operations at the water plant, and on other aspects of the supply and delivery system.~~
- ~~There may be some minor corrections / improvements that can be made to existing equipment to increase the efficiency of the water plant.~~
- ~~There is a theoretical surplus in production capacity of up to approximately 48,000 gpd.~~
- ~~There is a limited available water supply based on the flow in Luffenholtz Creek~~
- ~~Constant monitoring and adjustment of the current filtration system requires the oversight of an operator at all times (little automation.)~~
- ~~The treatment plant is not able to treat all water at all times due to turbidity. The plant is shut down when treatment requirements cannot be met and storage reserves may not be enough to handle additional hookups or emergency services.~~
- ~~The treatment system is currently limited by pump capacity. While there are 3 pumps each with a capacity of 120 gpm, only two are meant to be run at a time and the efficiency with two pumps running is less than one plus one. So the maximum capacity is 200 gpm with 2 pumps running.~~
- ~~The filtration unit is limited to an over-all flow rate of 175 gpm based on state regulations.~~

~~The City is currently working on developing plans and obtaining funding to improve the existing water system to address the concerns noted above, particularly because turbidity standards have increased. The City has received a grant to add new turbidity meters and other monitoring equipment along with system controls to meet these new turbidity requirements along with cryptosporidium standards. Other planned~~

~~improvements will include additional storage, which will provide water for fire suppression in the summer and allow additional settling time in the winter which will decrease the turbidity.~~

Demand for water is expected to increase due to new development in the Trinidad area in the upcoming years; hence, a plan needs to be developed for this increase in demand. The City's planning firm recently completed a Water Demand Assessment (SHN, August 2019) that looked at potential build-out within the City's Service Area, both within and outside of City limits and within the City's service area. The findings of that report can be summarized as follows:

- The City's water plant has the existing capacity to meet the demands of build-out within the City as well as some additional ADUs.
- Even after accommodating build-out in the City, there is capacity to serve some areas of the Service Area outside of City limits, but not all.
- The City should prioritize how and where water service will be extended outside of City limits.
- Build-out is not expected to occur for decades, and conditions can and will change within that time frame.

Based on previous estimates of low flows (e.g. 100-year return low flow) on Luffenholtz Creek, the creek is almost fully allocated in terms of water rights. In fact, it may be over-allocated in a dry year. The City recently started monitoring flows on the creek just below the intake for the water plant to ensure that required bypass flows are met. Initial results indicate that the flows were less than would be anticipated in a non-drought year (2018). In addition, climate change is likely to alter rainfall patterns and affect flows in the creek. Therefore, the City's Engineering firm completed a "Conceptual Hydrologic Assessment of the Luffenholtz Creek Watershed" (GHD memo dated October 2, 2019). That report included the following findings:

- The City has a water right that allows extraction of almost three times the current demand.
- The water right includes minimum bypass flow requirements.
- Low creek flows negatively impact the City's ability to withdraw water from the existing infiltration gallery.
- Other users, withdrawals and water rights exist upstream of the City's water plant, but limited information exists regarding these.
- Limited reliable data exists for estimating low return flows on Luffenholtz Creek. However, the existing data does show that levels have dropped below the City's water right plus the required bypass flows.
- Climate change, drought and upstream users all increase the risks and uncertainties regarding the ability of Luffenholtz Creek to meet the City's needs in the future.

In addition to the assessments summarized above, the City Engineer's office also recently completed a "City of Trinidad water demand and loss analysis" (GHD memo dated October 2, 2019), which found that the water loss from the City's water system exceeds what would normally be expected for such a system. The losses are likely due

to failing pipes and connections, and it was recommended that the City test various sections for pressure loss and prioritize replacement. Finally, the Engineer's office completed a "City of Trinidad alternative raw water source evaluation" (GHD memo dated October 2, 2019) to investigate alternative water sources to Luffenholtz Creek. The alternative sources considered were recycled/reclaimed water, desalination, rainwater catchment, spring catchment, other local creeks (Mill, Parker, McConnahas Mill), and Humboldt Bay Municipal Water District (HBMWD). The most feasible of these alternatives was found to be hooking into the HBMWD system via the McKinleyville CSD. This option has been considered in the past as well, but the idea has been controversial, primarily due to the potential for growth inducement in the area. This option is technically simple, since the MCSD was constructed to accommodate northward expansion, and it could be hooked directly into the City's existing water system. However, the permitting, agency coordination, community character considerations and public buy-in are much more complex.

In addition to the information above, there are several other water supply concerns/issues that have been considered in the development of the following policies:

- Expanding the current water supply at Luffenholtz Creek may be an option, though the Luffenholtz Creek watershed is located entirely outside of City limits. The City needs to coordinate with the County to ensure the creek is protected from development. Commercial cannabis operations are of particular concern due to their high water demands.
- In several areas, groundwater supply is highly variable. Wells in the area do not produce enough volume of water to meet the demand. Other concerns include contamination of wells from failed septic systems and use of pesticides and other chemicals.
- If they have riparian water rights, many property owners in the area outside the City use coastal streams as a water source, which raises the same concerns as wells. However, California Department of Fish and Game is already concerned about shortages in Mill Creek and Luffenholtz.
- Additional water use in the Planning Area may overburden soil capacity septic tanks and increase ground and surface water pollution.
- The Trinidad Rancheria has proposed development plans for a substantial project/development; they anticipate using the Luffenholtz City's water supply.
- The lack of water has acted as a development constraint along with the use of septic systems. The City previously lost a large amount of its water, approximately 40%, through leaks or unmetered users. A large leak was recently found along the main line in Scenic Drive, which gives the City somewhat more leeway for future water service.

In the past, the City had the ability to hook-up users outside the City along the main water lines, with 101 properties being served outside City limits. However, more recent Local Agency Formation Commission (LAFCO) regulations, the agency in charge of boundary changes, prohibit expansion of services outside jurisdictional lines without requiring annexation. Exceptions may be made in the case of polluted wells or other emergency situations, and/or if the property owner is adjacent to the City and agrees to

~~annexation. Additionally, because Luffenholtz Creek is near capacity, the City must retain water for additional connections and future uses inside the City~~

Goal CIRC-12: Ensure that the City’s water system, supply, and demand are managed for sustainability and the health and needs of users.

Water Service Policies

CIRC-12.1 Periodically assess the capacity of Luffenholtz Creek to provide domestic water; include variables such as existing and potential ~~riparian water (riparian and appropriative)~~ rights, groundwater wells, proposed developments, ~~particularly commercial cannabis~~, and impacts to water supply due to climactic change. (LU-8.1)

Commented [TP1]: CCC suggests this should be a program and does seem to meet the definition (in Introduction chapter) of a program.

Commented [TP2]: The wording of these references is not always the same, and will need to be updated.

Program CIRC-12.1.1: Prepare an annual water report to be presented to the City Council to keep the City up to date on the condition of the water system, need for improvements, level of use and capacity of the system.

CIRC-12.2 Upgrade the City’s water plant to improve efficiency, water quality and storage capacity as funding becomes available. (LU-8.2)

Commented [TP3]: CCC suggests this should be a program and does seem to meet the definition (in Introduction chapter) of a program.

Program CIRC-12.2.1: Develop a program for periodically upgrading existing distribution lines, including fire hydrants to current standards. Top priorities are repairing leaking lines and improving storage capacity at the treatment plant ~~and installing meters at currently unmetered public or other buildings.~~

Commented [TP4]: This has been done.

CIRC-12.3 ~~Promote Develop and implement~~ an effective water conservation program to minimize water consumption. Extend the City’s conservation program to properties outside the City that are hooked up to the City’s water system. Encourage the County and/or Watershed Council to provide water education. Encourage the County to implement a similar program in the Trinidad-Westhaven area. (CONS-4.1)

Commented [TP5]: CCC suggests this should be a program and does seem to meet the definition (in Introduction chapter) of a program.

Program CIRC-12.3.1: Pursue implementation of a ~~progressive~~ water rate structure ~~to that~~ encourages water conservation. Periodically review and amend the water rate structure to ensure that it promotes water conservation. (CONS-1d.1.1)

Commented [TP6]: These should be “other initiatives” and should probably be added to the water service section of the Land Use Element.

Program CIRC-12.3.2: Adopt a water efficiency landscape ordinance in accordance with AB 1881 and Department of Water Resources (DWR) requirements. (CONS-1d.1.2)

Commented [TP7]: I’m not sure if this ordinance would need to be part of the LCP. If so, this will need to be done as part of the IP update, and the program won’t be necessary.

Program CIRC-12.3.3: Promote the use of rainwater collection and greywater systems. ~~Encourage the County to update their regulations to improve opportunities for greywater reuse.~~ (CIRC-11.3)

Commented [TP8]: County already did this.

CIRC-12.4 If capacity and / or storage is adequate, study the feasibility of ~~forming a~~ Water District ~~that includes the area to the east and southeast of the City on either side of the freeway, where some properties are already connected to the system, to allow for~~

Commented [TP9]: I’m not sure what the advantages of forming a district over annexing these areas would be. It does provide a greater level of control without committing the City to providing the full range of City services. But annexation also has several other advantages. The concept originally came from the idea of starting a septic maintenance district in order to regulate septic systems outside the City. I have seen that as a recommendation going back at least as far as a water quality report from 1990. And if a septic district were formed, it would probably also make sense to include water.

additional connections outside the City, as the system allows. Eventual annexation should be considered. An 'annexation agreement' (agreeing not to object to future annexation) with the City is a minimum requirement for providing any new connections outside of City limits. Areas to the north of the City should be part of such a district if services are to be provided there in the future. (LU-8.52)

CIRC-12.5 The existing commercial area on the west side of Patrick's Point Drive south of Anderson Lane and the area on the east side of Patrick's Point Drive north to the CalFire (CDF) station, should be included in the City service area / water district to allow for future consideration of water service. Annexation, or an annexation agreement, is a requirement for water service expansion, unless it is already part of a services district. (LU-8.43)

CIRC-12.6 Depending on service capacity, the City's Sphere of Influence should be defined to include the City's water service connections, as well as all properties adjacent to the City's trunk line and those properties that are not zoned for timber production within the Luffenholtz and Mill Creek watersheds (refer to Fig. 4). The watersheds are to be included to provide directions and oversight on land use decisions that affect the City's Water Supply, including OWTS management. (LU-7.1)

CIRC-12.7 Consider expanding City services to areas outside City limits only if it can be done without significantly increasing the costs to residents within City limits, or if it is a public health emergency; annexation is a prerequisite for any service expansions. (LU-8.37-2)

Program CIRC-12.7.1: In the event of a proposal to expand the City water system, prospective customers shall provide the necessary funds in whole or in part to defer the cost of system improvements through an agreement with the City. This policy shall be implemented by provisions of the City Water System Service Ordinance.

CIRC-12.8 Do not allow connection to Humboldt Bay Municipal Water District unless there is a compelling public necessity and only when enforceable measures are included to assure that the general small-town community characteristic of the service area around the City does not adversely change.

~~*CIRC 12.9* — Assess the effects of proposed development, such as the Trinidad Rancheria plans and subdivisions, on the reduction flow in Luffenholtz Creek. Address negative impacts or threats to the City's water supply as soon as possible. (LU 9.2.4)~~

~~*CIRC 12.10* — Monitor land use activities and development projects within the Luffenholtz Creek watershed and oppose those activities and projects that may have adverse impacts on creek water quality and quantity (LU 9.2.3).~~

Commented [TP10]: Addressed in Land Use Element.

Union School District also manage land and make land use decisions affecting the City. Figure 2 shows where existing governmental facilities and land holdings are located. It is in the City's best interest to work cooperatively with those agencies that manage land in and around the City to further community goals. The City will seek to acquire any land within City Limits that may be disposed of by an agency if such acquisition will benefit the City.

The property owners in the City have opposed acquisition of residential areas for expansion of HSU's Telonicher Marine Laboratory at the west end of Edwards Street. State properties are exempt from paying property taxes so additional property acquisition by State agencies would also mean a gradual erosion of the City tax base, and it would affect the residential character of the town. Further, Section 30519(b) of the Coastal Act reserves CDP authority over State University lands in the Coastal Zone to the Coastal Commission rather than the local LCP. The Marine Laboratory is an important asset to the community for teaching, research and exhibits and is a partner with the City to achieve marine resource goals, but should not be allowed to reduce the importance of, or adversely affect, the fishing industry or the residential community.

Goal LU-75: Ensure that State owned lands are managed such that they are compatible with, and do not detract from Trinidad's coastal village character.

State and Federally Owned Lands Policies

LU-75.1 Development on lands of Trinidad State Beach and Trinidad School playing field, and any other State properties within City Limits, except the Telonicher Marine Lab, are subject to coastal development permit / design review approval from the City as required by the CA Coastal Act and the City's certified Local Coastal Program. In lieu of individual development proposals, the City may approve an appropriate Management Plan addressing specific future development activity on those lands.

Program LU-75.1.12 Work with federal agencies owning and managing property within the City to ensure appropriate consultation and coordination with the City.

D. DEVELOPMENT OUTSIDE OF CITY LIMITS

Land use decisions outside City limits affect the City in a variety of ways. Traffic and ~~upstream~~ pollution ~~or disturbance~~ are good examples. Land use designations on the lands under County jurisdiction surrounding the City differ from City designations ~~in the lands under County jurisdiction surrounding the City~~. Since the City's Planning Area is under Humboldt County jurisdiction, the land use categories shown in Figure 4 correspond to the existing Humboldt County General Plan (~~Framework Plan 1984~~Humboldt 21st Century, October, 2017). ~~Note that these land use designations may change as a result of the current update of the County General Plan.~~ There are ~~four~~

three different areas outside the City that have been designated based on their relationship to City Planning.

The first and the smallest of these designations is the Sphere of Influence, which represents the area where ~~the it has been determined that the~~ City has the capacity to provide services and that is anticipated to possibly be annexed in the future. The next is the City's Service Area, which is defined as the area that the City currently does and may potentially ~~may~~ provide water service. The third, and largest, area is the Planning Area. The Planning Area encompasses those areas that bear a relationship to City land use and planning in terms of resource use, land use, traffic, community, etc. ~~In addition, there is an Urban Limit Line that limits intensive growth, which some of the following policies are based upon.~~



The policies in the following three sections (LU-7 through LU-9) and associated goals and programs are not part of the certified LCP and shall not govern the review and approval of Coastal Development Permits.

1. Sphere of Influence

As ~~mandated defined~~ in Government Code § 56076425, ~~“the Local Agency Formation Commission (LAFCo) shall develop and determine the sphere of influence of each governmental agency within the county. the~~ Sphere of Influence (SOI) “means a plan for the probable ultimate physical boundaries and services area of a local government agency.” Spheres of Influence are determined by the Local Agency Formation Commission (LAFCo) based on various studies, including a Master Service Review (MSR). LAFCo also has responsibility for approving boundary changes and service connections with a mandate of fostering orderly growth and development that promotes the efficient delivery of services, and encourages the preservation of open space and agricultural lands. The ~~Sphere of Influence~~SOI, after adoption, shall be used by ~~the commission~~LAFCo as a factor in making ~~regular~~ decisions on proposals over which it has jurisdiction.” ~~The Sphere of Influence boundary will be determined based on the City’s “Master Service Element” that indicates capabilities and management of all services provided by the City (or district). An Municipal Service Review for the City of Trinidad was prepared by LAFCo in 2008 without City review or input. These elements Both the MSR and SOI Report need updating in order to be used to formulate Sphere of Influence SOI boundaries and dictate how and when land is developed around the City. The Sphere of Influence report is to be updated every five years.~~

~~The purpose of the Sphere of Influence is to promote orderly, regulated growth that best represents the desires of the community. It is intended to represent the anticipated physical boundaries and service area of the City for the next twenty years. Trinidad LAFCo adopted an SOI for Trinidad sphere of influence in 1984, but only a very small portion has actually been annexed into City Limits since that time. In the past, there has been a strong indicated desire on the part of Trinidad residents to maintain the compact urban form of Trinidad. Some residents outside City limits have also expressed an aversion to being annexed into City limits. Benefits to the City from~~

Commented [TP24]: Is this still true?

annexation include additional land use control, and potential increase in ~~property~~ tax revenues, including property, sales and transient occupancy. In particular, annexation would allow the City to expand its OWTS management program and increase protection of the Trinidad Head ASBS. It has also been suggested that annexation would benefit the City by increasing the population base for running a City government. In addition, annexation could help the City meet State requirements such as provision of housing and accommodation of visitor services. One of the main advantages to residents of being annexed would be the provision of City services, particularly water. At this time, Trinidad's ~~Sphere of Influence~~ SOI is relatively small, only including a small portion of the water Service Area. ~~A minimal population growth projected for the City and the adjacent areas as well as the restrictive nature of the land use policies contained in this Local Coastal Plan will help~~ The policies contained herein are based on the most current data and are intended to preserve the community's character.

Goal LU-7: To provide and maintain clear boundaries and policies for considering the future expansion of Trinidad

Sphere of Influence Policies

LU-7.1 Depending on service capacity, define the City's Sphere of Influence to include the City's water service connections, as well as all properties adjacent to the City's trunk line and those properties that are not zoned for timber production within the Luffenholtz and Mill Creek watersheds. The watersheds are to be included to provide direction and oversight on land use decisions that affect the City's Water Supply, including OWTS management. (CIRC-12.6)

~~LU-7.2 Consider expanding City services to areas outside City limits only if it can be done without significantly increasing the costs to residents within City limits, or if it is a public health emergency; annexation is a prerequisite for any service expansions.~~

LU-7.23 Consider annexations if it can be proven that they are economically, environmentally, politically or otherwise advantageous to the City. The City supports annexation as a positive means of City expansions, but shall evaluate annexation proposals on a case-by-case basis. The City shall support/pursue only those annexations that:

- Promote orderly development and redevelopment of land within the Sphere of Influence;
- Promote efficiency in service delivery;
- Are supported by the affected residents and property owners;
- Are beneficial to the City.

LU-7.3 Avoid annexations of individual parcels or groups of parcels that are not contiguous with the City.

2. City Service Area

Commented [TP25]: Arcata and Fort Bragg include annexation standards as part of their policies.

Commented [TP26]: Realistically, this seems too broad, because the City would never annex all of this area, and wouldn't serve water to upper watersheds.

Commented [TP27]: Moved to Service Area section

The “City-Service Area” refers to those areas that ~~do, or may in the future, will~~ receive all, or a major portion of the urban services (water ~~service~~, police protection, road maintenance, cemetery operation, fire protection, and planning and zoning) that are provided by/from the City. ~~Of the aforesaid services, w~~Water supply and distribution, and the absence of sewage collection and disposal facilities, are the major determinants of the urban form and density of development in the ~~City Service Area~~. ~~The City has a substantial water right on~~ Luffenholtz Creek, ~~but the creek~~ is small, and has only limited capacity to provide additional domestic water, ~~particularly during droughts; climate change adds to the uncertainty.~~ The City’s water plant also has limited storage and treatment capacity, but is ~~continually being periodically~~ upgraded as funding allows.

The Service Area boundary is based on the areas currently connected to City water. In addition, a commercial area to the north has been included based on potential future need of City water ~~in order to support commercial uses to serve residents of and visitors to Trinidad~~. The Service Area could become a Service District in the future, with greater powers, and separate governing board. Please see the Public Services section of the Circulation Element for additional information.

Goal LU-8: Manage City services to the maximum efficiency and benefit for residents as well as those outside City limits where appropriate.

City Service Area Policies

LU-8.1 The City is responsible for periodically assessing the capacity of Luffenholtz Creek to provide domestic water, including existing and potential riparian ~~and appropriative~~ rights and groundwater wells.

LU-8.2 Upgrades to the City’s water plant to improve efficiency, water quality and storage capacity will be completed as ~~needed and as~~ funding ~~allows becomes available~~.

LU-8.3 ~~Consider expanding City services to areas outside City limits only if it can be done without significantly increasing the costs to residents within City limits, or if it is a public health emergency; annexation is a prerequisite for any service expansions.~~

LU-8.43 The existing commercial area on the west side of Patrick’s Point Drive south of Anderson Lane and the area on the east side of Patrick’s Point Drive north to the CalFire (CDF) station property should be included in the City service area / water district to allow for future consideration of water service. Annexation, or an annexation agreement, is a requirement for water service expansion, unless it is already part of a services district. (CIRC-12.6)

LU-8.52 If capacity and / or storage is adequate, study the feasibility of forming a Water District that includes the area to the east and southeast of the City on either side of the freeway, where some properties are already connected to the system, to allow for additional connections outside the City, as the system allows. Eventual annexation should be considered. ~~An ‘annexation agreement’ (agreeing not to object to future~~

Commented [TP28]: The City of Arcata has a Sphere of influence that includes just a water service area (“intended for partial services”).

~~annexation) with the City is a minimum requirement for providing any new connections outside of City limits.~~ Areas to the north of the City should be part of such a district if services are to be provided there in the future. (CIRC-12.4)

3. Planning Area

Government Code § 65300 provides that a City consider areas outside the City limits that have a bearing on planning for the City. The City of Trinidad has determined that activity affecting twelve coastal watersheds is the area of critical importance; therefore, it is in the interest of Trinidad to play a more active role in the decision-making processes involving land located within these watersheds, and to include them in the planning area. Trinidad has adopted this watershed based approach to planning due to particular concerns about water supply, pollution, and impacts on coastal resources; activities that occur in the upper watershed can affect downstream resources.

The designated Planning Area delineated in the previous General Plan defines an area in which the City has interests outside of its City limits and its Sphere of Influence boundary. The Planning Area might affect the City in ways such as increased circulation, impacts on water quality, or economic provisions. The designation of a planning area may be in the interest of establishing cooperation efforts with other surrounding jurisdictions, landowners or interest groups, including Humboldt County, State Parks, Trinidad Rancheria, Green Diamond Resource Co. Westhaven Community Services District, etc... This area also includes the area of interest of the Trinidad Bay Watershed Council. By adopting this specific Planning Area, the City defines the area where land use decisions affect Trinidad. Figure 3 shows the existing and proposed Planning Area.

The proposed Planning Area is more centered on the greater Trinidad-Westhaven community. The Luffenholtz Creek drainage basin was included because it is the watershed for the City water supply and serves parcels adjacent to it and along the main line extension. Residential areas west of the freeway up to the Seawood interchange are included because they rely on the Trinidad area for commercial services and include visitor accommodations and facilities that support the local tourist and fishing activity. The forest area east of the freeway is included to ensure consideration of the potential impacts of activities to these coastal watersheds. The entire Planning Area, outside of City limits, is within Humboldt County jurisdiction.

The County has recently revised its General Plan and a revision of the County Zoning Ordinance Map will follow. ~~This will update the County's Framework Plan (1984).~~ The Trinidad Area LCP will also need to be updated for the coastal zone. The current County General Plan provides for specific designations throughout the planning area. Most of the Trinidad General Plan land use recommendations are consistent with present county designations (1984 Framework Plan). The reader is also referred to the County's ~~C~~urrent General Plan and LCP for discussion of the Urban / Rural areas and

policies or findings that apply for development in the areas outside the City but within the City's Planning Area.

Goal LU-9: Ensure the protection of the coastal watersheds, natural and community resources and the quality of life in and around Trinidad.

Planning Area Policies

LU-9.1 Assess impacts of development within the entire planning area when considering large projects and regional issues

Program LU-9.1.1: Adopt a watershed based approach to land use planning that accounts for the impacts of development on an entire watershed, not only the individual parcel or activity. Respond to County application referrals based on watershed impacts and encourage the County to do the same for City projects. (CONS Principle A)

LU-9.2 Request referrals from the County for projects within the Trinidad Planning Area and ~~Comment on relevant projects located within the Trinidad Planning Area~~ that could impact the City based primarily on goals and policies found throughout this General Plan and any specific or unusual circumstances.

Program LU-9.2.1: Provide comments and input during any revisions of the County's General Plan that may affect the Planning Area any future adoption of implementing ordinances, and any other agency's or organization's long range plan for that includes land within the City's Planning Area. Seek to have such plans recognize impacts that could occur to the City as a result of inappropriate changes that occur in the City's Planning Area.

Program LU-9.2.2: Review development projects in the County, including timber harvest plans, that may affect Luffenholtz Creek, Mill Creek and other Planning Area watersheds and provide comments to regulatory agencies emphasizing the need to protect water quality and quantity. Consider consistency with all relevant policies in the City's General Plan, particularly those found under Planning Area, Conservation and Water Quality, and the objectives of the Trinidad-Westhaven Integrated Coastal Watershed Plan.

Program LU-9.2.3: Monitor land use activities and development projects within the Luffenholtz Creek watershed and oppose those activities and projects that may have adverse impacts on creek water quality and quantity. (CIRC-12.10)

LU-9.3 Encourage coordination efforts between Trinidad officials and surrounding jurisdictions and landowners in order to address concerns about development projects that affect the Trinidad Planning Area and the Trinidad Head Area of Special Biological Significance / State Water Quality Protection Area.

Program LU-9.3.1: Request notification from responsible agencies (CDF for THPs, ACOE for fill or discharge permits, CALFIRE, PG&E, etc.) whenever possible regarding activities that will occur within the City's Planning Area. Inform responsible agencies of the types of projects that could have impacts on the water quality of the water resources of the Planning Area.

Program LU-9.3.2: Maintain open communication with the Trinidad Rancheria, and encourage the Rancheria to keep the City informed of upcoming projects by providing pertinent background information and studies related to such projects and allowing the City to provide early input on development proposals that could impact the City.

LU-9.4 The City designates both the Luffenholtz Creek and Mill Creek watersheds as "Critical Water Supply Areas," recognizing that these watersheds areas are primary water sources and limited in area so that current development makes the streams susceptible to a potential risk of contamination to the water supply from development activities. (see CONS-1e.3)

Program LU-9.4.1: Work with the County to ensure that the County designates Luffenholtz Creek and Mill Creek watersheds as "Critical Water Supply Areas" thereby providing increased scrutiny of and special protections from land use activities as defined in the Humboldt County Framework Plan and the Trinidad General Plan.

Program LU-9.4.2: Designate properties within a "Critical Water Supply Area" "Special Environment" to minimize further subdivision and reduce potential adverse land use densities until such time that improvements are made to the water supply system so that it is not so sensitive to land use impacts. Existing lots within the watershed may be considered suitable for single-family residence provided the septic tank system is carefully designed and installed to preclude pollution of the stream, and requires periodic inspection by and fees paid to the County Environmental Health Department.

LU-9.5 Develop and maintain an open relationship with landowners within the Planning Area, particularly those in Luffenholtz Creek, in order to facilitate landowner awareness of the need for water quality protection.

Program LU-9.5.1: Pursue adoption of a public education program regarding pesticides and other hazardous chemical, and when feasible, enter into a non-binding Memorandum of Understanding, or other agreement with property owners within the "Critical Water Supply Area" to minimize the use of these chemicals and reduce contamination of water supplies.

Program LU-9.5.2: Support the efforts of the Trinidad Bay Watershed Council to improve water quality in the Planning Area. Designate a City representative to

participate in the Watershed Council meetings and other activities to the extent practicable.

LU-9.6 Encourage responsible septic system use and installation within the Planning Area.

Program LU-9.6.1: Pursue grant funding to monitor and implement projects within the City's entire Planning Area to reduce pollution from onsite wastewater treatment systems. Encourage Humboldt County to participate to the maximum extent possible. Project goals include determining what areas and which onsite wastewater treatment systems are contributing the most pollution and offering financial incentives or other assistance to help landowners fix problems. Consider the feasibility and desirability of forming a Septic Maintenance District with the County that encompasses the area from Trinidad to Moonstone. (PUBL-18, CIRC-11.2)

LU-9.7 Preserve economically viable timber stands for use as commercial timber while protecting water quality, special status species and sensitive habitats (Goal CONS-8).

LU-9.8 Provide a geographically distributed inventory of mining sites protected from incompatible land uses, permitted and operated to prevent significant environmental impacts and to satisfy long-term demand for mineral resources and construction materials (Goal CONS-11).

Commented [TP29]: Although the City has no land use authority in the planning area, these types of policies would be used in commenting on County projects. However, these policies are already found in other sections of the GP, so I'm not sure they belong here.

current forms and densities, irrespective of their redesignation to Visitor Serving Commercial and Commercial Waterfront plan and zoning designations.

Other Initiatives

- The City and County should cooperate closely in the development of the unincorporated area surrounding the city and should allow for appropriate uses contiguous to the city.
- The City supports annexation as a positive means of city expansions but shall evaluate annexation proposals on a case-by-case basis. In reviewing these proposals, the City shall consider the questions listed in Table 1-3. The City shall support only those annexations that:
 - Promote orderly development and redevelopment of land within the Urban Boundary;
 - Promote efficiency in service delivery;
 - Are broadly supported by affected residents and property owners; and
 - Are beneficial to the City.

TABLE 1-3 ANNEXATION CONSIDERATIONS		
1.	Resident Support	What is the likelihood of gaining community support from property owners in the annexation area?
2.	Development and/or Redevelopment Potential	Will the annexation add vacant developable land to the city or is there potential for significant redevelopment?
3.	Strategic Importance	Will the annexation further city goals?
4.	Preemptive Action	Would the annexation help prevent unwanted or incompatible development on the city's periphery?
5.	Revenue Potential	What amount of revenue can be anticipated from property, sales, and other taxes; will the annexation result in a net revenue gain or a net loss to the city?
6.	Cost of Providing Ongoing Municipal Services	What will it cost to provide police services, fire services, road maintenance, parks and recreation, sewer service, and water service; can the city bear the cost of providing these ongoing services in the annexed area?
7.	Need for Upgrading Existing Infrastructure	To what degree do existing drainage systems, water delivery systems, sewer collection systems, streets and roads, and other infrastructure need to be brought up to city standards; can the city bear this cost?

8. Potential for Improved Service Delivery	Is there potential for improved service delivery in the annexed area and/or the city as a whole or will some services be reduced?
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- The City further encourages the private development of visitor-serving facilities and supports private/public partnerships that build such facilities or that facilitate visitor activities.

1.B. VISITOR SERVING COMMERCIAL (VSC) AREA

Goals

- Goal 1.B.1:** To create a compact, pedestrian-oriented, economically-robust VSC area (see Figure 6) that provides a clear geographic focus for attracting visitors and residents and for increasing private sector investment.
- Goal 1.B.2:** To expand and enhance the VSC area as a tourist destination.

Policies

- 1.B.1.** The areas designated as Visitor Serving Commercial VSC shall be maintained as the City’s main visitor commercial activity center.
- 1.B.2.** Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.
- 1.B.3.** The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.1.B.3.
- 1.B.4.** If and when average annual occupancy rates at Del Norte County visitor accommodations exceed 70%, removal or conversion of existing lower cost visitor serving accommodations shall be prohibited unless: (1) the converted facility will be replaced with another facility offering the same or a greater number of lower cost visitor serving units, or (2) an in lieu fee in an amount necessary to off-set the cost to replace the lower cost visitor serving units in Del Norte County shall be imposed. Lower cost facilities shall be defined as any facility with room rates that are below 75% of the Statewide average room rate, and higher cost facilities shall be defined as any facility with room rates that are 125% above the State wide average room rate. Statewide average room rates can

driveways onto Ocean View Drive and includes design and site planning features to ensure compatibility with the surrounding single-family residential neighborhood.

Sphere of Influence



Policy LU-2.1 through Policy 2.5 and associated Programs are not part of the certified LCP and shall not govern the review and approval of Coastal Development Permits

Goal LU-2 Establish and maintain clear boundaries and guidelines for the future expansion of Fort Bragg.



Policy LU-2.1 Boundaries of the Sphere of Influence: Revise the existing Sphere of Influence boundaries, as submitted to Local Agency Formation Commission (LAFCO).



Policy LU-2.2 Annexations to the Municipal Improvement District Boundary: Require annexation approval prior to permitting new connections to the sanitary sewer system operated by the City's Municipal Improvement District in the Sphere of Influence. Out-of-area service agreements may be approved for new connections to the sanitary sewer system for development proposals that comply with the policy of the Municipal Improvement District regarding projects that provide affordable housing per Resolution No. ID 230-2003, adopted on December 8, 2003.



Policy LU-2.3 County Referrals: Review and comment on development projects in the City's Sphere of Influence which are under the jurisdiction of Mendocino County.

Program LU-2.3.1: Establish a Memorandum of Understanding between the City and Mendocino County regarding procedures for project review within the Fort Bragg Sphere of Influence.



Policy LU-2.4 Annexation Standards: Require annexations to the City to meet all of the following standards:

- Areas annexed must be able to be served by existing City facilities and by facilities provided by other agencies, or by environmentally and economically feasible improvements to these facilities. Prior to City approval of an annexation application, findings shall be made indicating that: necessary public and private infrastructure to support the development is available, or that a development plan for extending or upgrading the infrastructure has been adopted, and that the annexation would not result in a substantial reduction or deterioration of public services and facilities, including streets, water supply, wastewater treatment, storm drainage facilities, fire, police, schools, and other public services and facilities.
- Proposed annexations must be contiguous to existing developed areas. Annexation proposals that "leapfrog" over vacant and undeveloped land shall not be approved.

- Based on a cost-revenue analysis, annexations shall have a cumulative net positive fiscal effect on the City within fifteen years of approval. The fiscal analysis must demonstrate that annexed properties would generate sufficient City revenues to pay for ongoing services to the annexed area and infrastructure cost benefiting annexed area borne by City – such as public safety, road maintenance, street lighting, etc. To achieve this, property owner(s) may be required to establish Mello-Roos districts and/or other forms of benefit assessment districts as a condition of, and at the time of, annexation to the City.
- All annexation applications shall include an environmental review document which provides full disclosure of any potential adverse environmental impacts. To the maximum extent possible, annexations that would result in significant environmental impacts will not be approved.
- A development plan, including maps and text, showing how existing and proposed future development within the annexation area contributes to the attainment of Coastal General Plan goals and policies, shall be submitted with an annexation application.
- All proposed future development within an annexation area shall be consistent with the land use designations shown on the Land Use Designations Map and all other requirements of the Coastal General Plan and the Fort Bragg Municipal Code.
- A cost-revenue analysis is not required for parcels that are annexed by the City of Fort Bragg for public purposes.

Program LU-2.4.1: Require a fiscal impact analysis of proposed annexations, at the applicant's cost, as deemed appropriate by the City. The fiscal impact analysis shall include, at a minimum, the cost of providing City services on a per capita basis for residential projects, or per square foot of building for commercial and industrial projects, the impact on existing and future property owners, and a comparison of the potential revenues anticipated from the proposed annexation versus the cost to the City of providing services for a period of at least five years from the date of project completion.



Policy LU-2.5 Discourage Piecemeal Annexations: Discourage annexations of small, individual parcels of land in a piecemeal fashion.

Program LU-2.5.1: Consider revising the Coastal LUDC to establish a minimum area for an annexation request or a process for pre-approval of the annexation area by the City Council prior to accepting an annexation application as complete.

Program LU-2.5.2: Annexation applications should include, to the maximum feasible extent, the entire annexation area as shown in Map LU-3: Annexation Areas. Annexation applications for smaller subareas may be allowed for parcels that are annexed by the City of Fort Bragg for public purposes and for projects that provide affordable housing consistent with the criteria established in Resolution No. ID 230-2003, adopted on December 8, 2003.

WHAT'S SO SPECIAL ABOUT SPECIAL DISTRICTS?

A Citizen's Guide to Special Districts in California

Fourth Edition

October 2010

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Introduction

Most of us don't know much about local governments. We know less about special districts. Special district advocates hail special districts as the best examples of small-town democracy. Their critics say that special districts make local government too complex. *What's So Special About Special Districts?* untangles the basic facts about this least known segment of local government.

Most Californians don't understand special districts. Most of us don't know:

- How many exist (about 3,300).
- What they do (services from A to Z --- from airports to zoos).
- Who runs them (maybe your next-door neighbor).
- Or even what they spend on local services (about \$38 billion a year).

Celebrated as the best example of democracy, cursed as the worst form of fragmented government, and generally misunderstood even by the experts, special districts are California's unique contribution to local government. The question remains: *What's so special about special districts?* This citizen's guide provides the answer: ***focused service***.

Focused because special districts only serve in specifically defined areas, unlike counties and cities that provide services throughout their boundaries. Special districts are also ***focused*** because most of them provide only a single service, allowing them to concentrate on one activity. ***Service*** because districts deliver only the public programs and public facilities that their constituents want. Counties and cities provide multiple programs, some of them mandated by the federal and state governments. Special districts provide the public services that the public wants.

Our citizen's guide answers many of your questions about California's most abundant form of local government. In plain language, this citizen's guide explains what special districts are, where districts came from, their legal powers, and different ways to understand them. This guide also tells you where to get more information about the special districts that serve you.

Frequently cited by other authors, this report has become a standard introduction to special district government since the Committee first published it in 1991. But much has changed in 20 years. The Legislature has shifted billions of dollars of property tax revenues away from local agencies, including districts. The voters amended the California Constitution to make it harder to raise local revenues (Proposition 218 in 1996), harder for the Legislature to tamper with local governments' revenues (Proposition 1A in 2004), but easier to get access to public records and meetings (Proposition 59 in 2004). The California economy has been through two major recessions. Our Fourth Edition documents special districts' current financial status, explores what is and what is not a special district, explains what services districts provide, and describes how citizens can effect changes in the districts which serve them.

Democracy works best when people know about the governments that serve them. This guide will make you smarter about the special districts that serve you.

What's a Special District?

State law defines a special district as “any agency of the state for the local performance of governmental or proprietary functions within limited boundaries.” In plain language, a special district is a separate local government that delivers a limited number of public services to a geographically limited area.

Special districts have four distinguishing characteristics. Special districts:

- Are a form of government.
- Have governing boards.
- Provide services and facilities.
- Have defined boundaries.

Inadequate revenue bases and competing demands for existing taxes make it hard for counties and cities to provide all of the services that their constituents want. When residents or landowners want new services or higher levels of existing services, they can form a district to pay for them. Fire districts, irrigation districts, cemetery districts, and mosquito abatement districts exist today because taxpayers were willing to pay for public services they wanted. Special districts localize the costs and benefits of public services. Special districts let local residents get the services they want at prices they're willing to pay.

So, what's so special about special districts? Focused services. Special districts are a type of local government that delivers specific public services within defined boundaries.

Special districts deliver highly diverse services including water, electricity, mosquito abatement, and fire protection. Most special districts serve just a single purpose, such as sewage treatment. Others respond to a wide range of needs, as in the case of community service districts, which can deliver up to 32 services.

Districts' service areas can range from a single neighborhood to vast areas. For example, the Metropolitan Water District of Southern California serves nearly 19 million people in over 5,200 square miles in six counties, while the Kingsbury Greens Community Services District (Nevada County) runs the sewage system for 45 condominiums on 7.65 acres. Most special districts' operate within just one county, but some districts' boundaries cross over city limits and county lines. The Contra Costa County Fire Protection District serves unincorporated territory plus nine cities. The Roubidoux Community Services District delivers services to communities in two different counties: Riverside and San Bernardino. Unlike counties and cities, special districts' boundaries aren't always limited to contiguous territory. For example, the Pajaro/Sunny Mesa Community Services District (Monterey County) serves several separate pockets of territory.

Special districts have most of the same basic powers as counties and cities. They can sign contracts, employ workers, and acquire real property through purchase or eminent domain. Following constitutional limits, they can also issue bonds, impose special taxes, levy benefit assessments, and charge service fees. Like other governments, special districts can sue and be sued.

Special districts have **corporate powers** and **tax powers**, but rarely the **police power**. *Corporate power* is the ability to “do things,” like building public works projects such as parks and sewers. It’s the power to run recreation programs and collect garbage. *Tax power* is the authority to raise money to pay for these projects and services. *Police power* is different; it’s the authority to regulate private behavior to accomplish a public goal. Governments that make rules and enforce them use the police power: zoning property, requiring business licenses, or setting speed limits. Special districts rarely have police powers. Instead, they usually build public facilities and provide services. When special districts do have police powers, they are usually related to some corporate power. One example is banning alcoholic beverages from a park district’s picnic area.

What a Special District is Not

Now that we understand what special districts are, let’s look at what special districts are not.

- **Special districts are not state government.**

Special districts are local agencies which deliver specific services to specific communities. Operating under state laws, special districts are autonomous government entities that are accountable to the voters or landowners they serve. State officials, however, oversee special districts. For example, special districts must send their annual financial reports to the State Controller’s Office. Districts must also follow the state laws for special taxes, bonded debt, public hearings, public records, and elections.

- **Special districts are not county governments or cities.**

Counties and cities are *general purpose* governments. Counties and cities perform a broad array of services to protect the health, safety, and welfare of all their citizens. Special districts are *limited purpose* governments. Special districts can provide only the services allowed by state law and supported by their residents. Sometimes county supervisors or city councils are special districts’ governing boards, but those districts are legally separate local entities.

- **Special districts are not school districts.**

School districts exist to provide one service --- public education. Special districts can deliver a variety of public services, excluding education. School districts get most of their money from the state government. Special districts rely mostly on local revenues.

- **Special districts are not “Mello-Roos” districts or benefit assessment districts.**

Counties, cities, school districts, and many special districts can create Mello-Roos Act community facilities districts and benefit assessment districts to finance public works and public services. Mello-Roos districts and benefit assessment districts are just financing mechanisms and do not deliver services. Special districts use these financing mechanisms to provide public services.

- **Special districts are not redevelopment agencies.**

Cities and counties set up community redevelopment agencies to eliminate blight by paying for public and private improvements and economic development efforts. Special districts do not exist to eliminate blight. Special districts provide public services and infrastructure that help communities, but they're not in the business of direct economic development.

- **Who's in? Who's out?**

Most of our facts about special districts come from the annual *Special Districts Annual Reports* produced by the State Controller's Office. The total number of special districts included in this citizen's guide (3,294) varies from the State Controller's report (4,776) because the Controller defines special districts differently. The State Controller's report has a very broad reach, including 1,482 entities that we don't think are real special districts.

Our guide omits entities that don't share all four of the key characteristics: is a government, has a governing board, provides services, and has boundaries. For example, nonprofit corporations don't appear in our count because they're corporations, not governments. To be clear, we don't count: air pollution control districts, flood control maintenance districts, health districts, highway lighting districts, maintenance districts, vehicle parking districts, road maintenance districts, permanent road divisions, joint powers agencies, and nonprofit corporations. Neither we nor the State Controller count benefit assessment districts, business improvement districts, geologic hazard abatement districts, Mello-Roos Act community facilities districts, multi-family improvement districts, or parking and business improvement districts.

A Short History of California's Special Districts

Like hula hoops, martinis, and freeways, special districts became an art form in California. Special districts first arose to meet the water needs of San Joaquin Valley farmers. Frustrated by an inconsistent water supply and unstable prices, farmers in Stanislaus County organized the Turlock Irrigation District under the Wright Act of 1887. The Wright Act allowed landowners to form new public entities to deliver irrigation water, and to finance their activities with water rates and bond sales. As California's first special district, the Turlock Irrigation District made it possible for local farmers to intensify and diversify their crops.

While the earliest irrigation districts served rural areas, the trend was towards delivering water to urban and suburban communities. In the early 1900s, water districts were primarily located in northern and central California. After 1950, they spread to Southern California to satisfy the growing suburban water demands.

In the 20th Century, special districts increased dramatically in both number and scope. The periods of prosperity and population growth that followed both World Wars increased the demand for public services of all kinds and, consequently, special districts. Special districts became a popular way to meet these needs. Unlike the complex bureaucracies that can come with cityhood, special districts were flexible and provided desired services quickly and efficiently.

The statutory authorization for *mosquito abatement districts* in 1915 shows the recurring connection between the real estate industry and the desire for local services. Salt marsh mosquitoes around the San Francisco Bay and higher than average malaria cases in rural counties prompted legislators to allow local officials to form mosquito abatement districts. The 372 *fire protection districts* can trace their origins to a 1923 state law. In 1931, the Legislature authorized recreation districts, the forerunners of today's 108 *recreation and park districts*. *Hospital districts* arose in 1945 because of a statewide shortage of hospital beds. Although originally created to address individual services, special districts later encompassed multiple needs. The Legislature provided for multi-purpose *county service areas* in 1953 and *community services districts* in 1961.

Special Districts' Statutory Authority

Special districts operate either under a **principal act** or a **special act**. A *principal act* is a generic statute which applies to all special districts of that type. For example, the Community Services District Law governs all 325 community services districts. There are about 50 principal act statutes which local voters can use to create and govern special districts.

Occasionally, local circumstances don't fit the general conditions anticipated by the principal acts. In those cases, the Legislature can create a *special act* district that's tailored to the unique needs of a specific area. Districts which are regional in nature, have unusual governing board requirements, provide unique services, or need special financing, result in special act districts. Examples of districts formed under special acts include the Embarcadero Municipal Improvement District (Santa Barbara County), the Humboldt Bay Harbor, Recreation, and Conservation District, and the Shasta-Tehama County Watermaster District. There are about 125 special act districts.

All principal acts are state laws in the California state codes, whereas most special acts are not codified. However, for convenience, many of the water districts' special acts appear in the Appendix to the California Water Code. For a list of these acts, see Appendix A in the State Controller's *Special Districts Annual Report*.

Types of Special Districts

Special districts' activities are as diverse as the communities they serve. The most common type of special district in California are the 895 County Service Areas, while the Golden Gate Bridge, Highway and Transportation District is an example of a category with just one member.

With about 3,300 special districts, it may seem overwhelming to try to understand the purpose and function of the districts. To simplify that task, let's break down the districts into pairs of categories. One way of understanding districts is to look at their various contrasting features:

- Single function versus multi-function.
- Enterprise versus non-enterprise.
- Independent versus dependent.

Single Function versus Multi-Function Districts.

Most special districts perform only a single function. Single function districts deliver just one service such as water, sewage, or fire protection. The Happy Camp Cemetery District (Siskiyou County) is an example of a single function special district. Cemeteries are the only service that the 252 public cemetery districts can provide.

Multi-function districts provide two or more services. County Service Areas (CSAs) may provide any service which a county can provide. For example, CSAs provide animal control, libraries, police protection, snow removal, and weed abatement.

Some multi-function districts only offer a few of the services they are authorized to provide. For example, the Community Services District Law allows CSDs to provide up to 32 different services, but the Buzztail CSD (Butte County) offers only water service.

The powers which state law authorizes but a district does not currently provide are called its *latent powers*. Before a special district can activate one of its latent powers, it needs approval by the Local Agency Formation Commission (LAFCO). Significant protests may require the district to get its voters' approval. If the new service requires new revenues from special taxes or benefit assessments, the district must also get those approvals from voters or property owners.

Enterprise versus Non-enterprise Districts.

Just over a quarter of the special districts are enterprise districts. Enterprise districts deliver services that are run like business enterprises --- they charge for their customers' services. For example, a hospital district charges room fees paid by patients, not the district's other residents. Water districts charge water rates to their customers. Nearly all of the water, wastewater, and hospital districts are enterprise districts.

Non-enterprise districts provide services which don't lend themselves to fees. Fire protection services and mosquito abatement programs benefit the entire community, not just individual residents. No direct cost/benefit relationship exists in the services provided by non-enterprise districts. Consequently, non-enterprise districts generally don't charge user fees for their services. No one wants to put a meter on a park district's swings or charge residents to put out a house fire. Non-enterprise districts rely overwhelmingly on property tax revenues and parcel taxes to pay their operational expenses. Services commonly provided by non-enterprise districts include cemeteries, fire protection, libraries, and police protection. Although non-enterprise districts rely primarily on non-fee revenue, certain services, such as a recreation and park district's swimming pool or soccer programs, can generate some fee revenue.

Independent versus Dependent Districts.

About two-thirds of the state's special districts are independent districts. Independent districts have their own separate governing boards elected by the districts' own voters. For example, local voters elect the board of directors which runs the Rancho Simi Recreation and Park District (Ventura County). Independent districts also include districts where the appointed boards of directors serve for fixed terms. Cemetery districts are independent districts because county boards

of supervisors appoint the residents who serve on the districts' boards of trustees to fixed four-year terms. Independent special districts include library districts, memorial districts, mosquito abatement districts, and resource conservation districts.

Dependent districts are governed by other, existing legislative bodies (either a city council or a county board of supervisors). All County Service Areas, for example, are dependent districts because their county boards of supervisors govern them. The San Bernardino County Board of Supervisors is the *ex officio* governing board for the Yucca Valley Recreation and Park District, making it a dependent district. Because the Oceanside City Council also serves as the board of directors for the Oceanside Small Craft Harbor District (San Diego County), the District is a dependent special district.

A community's registered voters usually choose an independent district's board of directors. But in some water districts, political power rests with the landowners. Where the districts' services primarily benefit land and not people, the courts have upheld the use of *landowner-voter districts*.

Who votes?

The California Constitution says that "The right to vote or hold office may not be conditioned by a property qualification." But state laws provide for some "landowner-voter districts" where the district directors or the voters (or both) must own land within the district. How is that possible?

The United States Supreme Court tackled this question in a case called *Salyer Land Company v. Tulare Lake Basin Water Storage District*, 410 U.S. 719 (1973).

Some landowners and resident registered voters within the District claimed that it was unconstitutional to restrict voting rights to landowners. Further, they argued that it was inequitable that smaller landowners received fewer votes than larger landowners. The plaintiffs urged the creation of a new policy so that all residents in the District would be permitted only one vote regardless of land ownership.

The District argued that its irrigation services only benefited the land. Thus, any effects on non-landowner residents were indirect and did not entitle them to vote. Also, the number of votes allotted to landowners was proportional to the assessed value of the land, and therefore relative to each landowner's benefits and burdens. The Supreme Court agreed with the defendant and upheld landowner-voting because the District "provides no service to the general public."

Special districts' governing boards can vary with the size and type of the district. Most districts have five-member governing boards. Other governing boards vary from three to 11 or more members. Because of its special legislation, the Metropolitan Water District of Southern California has 37 board members. Many larger districts have professional general managers, similar to city managers or county administrators, who run the daily operations. The governing boards adopt the broad policies that the general managers carry out.

These three distinctions about special districts aren't mutually exclusive. It's possible to have an independent, multi-function, enterprise special district, such as the Whispering Palms Community Services District (San Diego County). The District is *independent* because its voters elect their own board of directors; it's *multi-function* because the District provides sewers, street lighting, and road maintenance; and it's *enterprise* because local officials charge their customers for the sewer services. Conversely, County Service Area No. 19 (Marin County) is a dependent, single function, non-enterprise district. The CSA is *dependent* because the Marin County Board of Supervisors governs it; it's *single function* because it delivers only one service; and it's *non-enterprise* because that sole service is fire protection.

Funding Special Districts

To better understand how special districts pay for themselves, let's divide their spending into two broad categories:

- Spending on operations and maintenance (programs).
- Spending on capital projects (public works projects).

Operations and Maintenance.

To pay for their regular operations, special districts generate revenue from three basic sources: taxes, benefit assessments, and service charges.

General taxes. When the voters amended the California Constitution by passing Proposition 13 (1978), they stopped local officials from levying separate property tax rates. Instead, county officials collect a uniform 1% property tax rate and allocate the resulting revenues to other local governments, following complicated formulas in state law. Most special districts get a share of these general property taxes. In 2007-08, county officials allocated about \$3.6 billion in general property tax revenues to special districts. Proposition 218 (1996) constitutionally prohibited special districts from levying their own general taxes.

Special taxes. Nearly all special districts can levy special taxes, if they get 2/3-voter approval. Often called "parcel taxes," these special taxes are usually a flat amount for each lot or each acre of ground. The Windsor Fire Protection District (Sonoma County) relies on two special taxes --- both approved by the District's voters --- for most of its annual revenues. Some property owners are familiar with the parcel taxes that special districts levy under the Mello-Roos Act. Details about which special districts can levy special taxes appears in *Revenues And Responsibilities: An Inventory of Local Tax Powers* on the Committee's webpage: http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/REVENUESANDRESPONSIBILITIES.pdf

Benefit assessments. Many special districts can charge benefit assessments to pay for operating and maintaining public facilities and service programs that directly benefit property. Proposition 218 (1996) required assessment amounts to reflect the "proportionate special benefit" that the property receives. Benefit assessments are constitutionally distinct from taxes in several important ways. One key difference between assessments and taxes is that the affected property owners must give their approval for benefit assessments in a weighted-ballot election

while special taxes require the voters' approval. More information about benefit assessments is in *Assessing The Benefits of Benefit Assessments: A Citizen's Guide to Benefit Assessments in California (Second Edition)*, on the Senate Local Government Committee's website: http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/BenefitAssessmentsPublication.pdf

Service Charges. Special districts that run enterprise activities or deliver specific services can pay for their activities with service charges. Water rates generate the revenue that the Rainbow Municipal Water District (San Diego County) needs to run the community's water systems. The Modesto Irrigation District (Stanislaus County) sends bills to its electricity customers. Hospital charges help support the Seneca Hospital District (Plumas County). In 2007-08, special districts' enterprise revenues totaled nearly \$25.2 billion.

<u>Special Districts' Enterprise Revenues (2007-08)</u>	
Water	\$8,099,005,000
Transit	4,634,395,000
Waste Disposal	3,478,224,000
Electric Utility	4,171,583,000
Hospital	4,094,546,000
Airport	457,296,000
Harbor and Port	<u>250,658,000</u>
Total	\$25,185,707,000

Even some non-enterprise districts collect service charges to pay for special programs. For example, the Hayward Area Recreation and Park District (Alameda County) charges green fees to play on the District's Skywest Golf Course.

Capital Projects.

Special districts create debt to borrow the money that they need for capital projects, such as expanding a wastewater treatment plant, acquiring parkland, or buying a new fire engine. Special districts' total long-term debts of all kinds were approximately \$72.4 billion in 2007-08.

Special districts pay off their *general obligation bonds* with higher property tax rates that require 2/3-voter approval. The Rand Communities Water District (Kern County) issued general obligation bonds to accumulate the capital needed for its water system. User fees pay for special districts' *revenue bonds* which may require majority-voter approval. The Groveland Community Services District (Tuolumne County) issued four revenue bonds to improve its sewer system. *Benefit assessment bonds* need the weighted-ballot approval of the property owners who own the properties that benefit from the special districts' public works projects. That's the approach used by the Las Gallinas Valley Sanitary District (Marin County) for its sewer improvements. *Mello-Roos Act bonds* also require 2/3-voter approval, but their revenue streams come from parcel taxes. Other, more exotic borrowing devices include certificates of participation, promissory notes, and loans from the state and federal governments.

Loss of Funding for Special Districts.

Special districts have coped with three decades of tough financial times. In 1977-78, the year before the voters passed Proposition 13, special districts received \$945 million in property tax revenues. In 1978-79, their property tax revenues dropped to \$532 million, a loss of almost 50%.

In response to Proposition 13, legislators encouraged the special districts with the power to raise revenues with user fees and service charges to start the transition to fees and charges and to reduce their reliance on property tax revenues.

To help local governments weather the fiscal shock caused by Proposition 13, the state sent more state money to school districts and shifted some of the schools' property tax revenues to counties, cities, and special districts. For special districts, these supplemental property tax revenues went into a Special District Augmentation Fund (SDAF) in each county. The county supervisors then allocated the SDAF money to the special districts in their counties. This practice lasted from 1978 to 1992.

Faced with huge budget deficits in 1992-93 and again in 1993-94, the state shifted almost \$4 billion annually in property taxes from local governments (counties, cities, special districts, and redevelopment agencies) to an Educational Revenue Augmentation Fund (ERAF) in each county. The property tax revenue in the ERAF supports schools. The continuing ERAF shifts help the state fulfill its constitutional duty to pay for schools. Enterprise special districts had better chances of coping with the ERAF shifts because their fees generate revenues. The ERAF shifts hit the non-enterprise districts especially hard because they have few ways to make up for the lost revenues. Special legislation has granted fiscal relief to some special districts.

Proposition 1A (2004) made it much harder for the state to shift property taxes and other local revenues away from counties, cities, and special districts. These constitutional protections restore some fiscal stability to special districts.

How Much is Too Much?

A 2000 report from the Little Hoover Commission revealed that special districts reported more than \$19.4 billion in reserves to the State Controller in 1996-97. Enterprise special districts held most of these reserves. This large figure raised a red flag for policy-makers and the public. Why were the districts setting aside so much money? And how did they plan to spend it?

Special district leaders argued that there were legitimate reasons for these reserves. District officials had allocated nearly all of the reserve dollars into specific funds for earmarked purposes. Special districts also used their reserve accounts to accumulate the capital needed to pay for large public works projects, rather than paying future interest on borrowed money. Further, reserves provided a safety cushion in lean fiscal years, stabilizing consumers' rates.

Special districts, taxpayers, and legislators learned that special districts should improve how they report their fiscal activities, including the purposes for their reserves. Out of this controversy came a state law that required the State Controller to publish an annual electronic report listing

the 250 special districts with the largest total revenues. For 2007-08, the three special districts with the largest total revenues were:

- Sacramento Municipal Utility District (\$1,372,262,958).
- Metropolitan Water District of Southern California (\$1,267,721,814).
- Los Angeles County Metropolitan Transportation Authority (\$1,209,788,940).

For the complete list, see <http://lgrs.sco.ca.gov/sb282/index.asp>.

LAFCO Cost-Sharing.

Until 2001, county governments paid 100% of costs to operate the Local Agency Formation Commissions (LAFCOs), but legislative reforms spread those costs more broadly. When independent special districts get seats on the LAFCO, they must share the commission's costs with cities and the county government. Half of the 58 LAFCOs have special district representation, so special districts in those 29 counties pay a third of their LAFCOs' costs. A district's contribution is proportionate to its revenue, with some exceptions.

Advantages & Disadvantages

Many people disagree over the usefulness and desirability of special districts. Before you make up your own mind, consider these arguments.

Advantages:

Special districts tailor services to meet local needs. Counties and cities must protect their residents' health, safety, and welfare and, thus, must provide many services, regardless of citizen demand. Special districts, however, only provide the services that their communities desire.

Special districts link costs to benefits. General purpose local governments --- counties and cities --- levy general taxes to pay for public services. The services that taxpayers receive are not directly related to the amount of taxes they pay. In a special district, only those who benefit from the district's services pay for them. Those who do not benefit do not pay.

Special districts respond to their constituents. Because most special districts are geographically smaller and have fewer residents than counties and cities, they're more responsive to their constituents. Small groups of citizens can be quite effective in influencing special districts' decisions.

Disadvantages:

Too many special districts means inefficiency. Many special districts provide the same services that counties and cities provide. Overlapping jurisdictions can create competition and conflict among special districts, and also between districts and general purpose governments. In addition, when communities incorporate, some Local Agency Formation Commissions (LAFCOs) fail to dissolve the special districts that exist within the new city limits, resulting in extra administrative costs and duplicated services.

Special districts hinder regional planning. Having numerous special districts can hamper planning efforts. For example, it can be difficult to organize the various water, sewer, and fire services in one region to deliver services to property owners and residents. Because about 2/3 of the districts have independent governing boards, no single agency coordinates their efforts.

Special districts decrease accountability. The multiplicity of limited purpose special districts can make it harder for residents and property owners to find out who's responsible for services. Separate special districts may provide water, sewer, parks, library, and fire protection services to the same unincorporated community. Residents have a hard time finding out who's in charge. Furthermore, the narrow and technical nature of a district's activities often results in low civic visibility until a crisis arises. Special district elections typically have very low voter turnouts. Although some view low voter turnout as a sign of voter satisfaction, representative democracy relies on broad participation.

Frequently Asked Questions

Now that you have a basic understanding of special districts, you may have some specific questions you want answered. We explain the sources for our answers in Appendix C. Here are a dozen of the most frequently asked questions.

1. How can I find out if I live in a special district?

The easiest way is to call your Local Agency Formation Commission (LAFCO). Each county has a LAFCO which is responsible for forming and dissolving special districts. You'll find a directory of LAFCOs at www.calafco.org. You can also look on your county property tax bill to see if some of your tax dollars go to a special district.

2. How can I form a special district?

District formation follows five steps:

- *Application.* Registered voters in the proposed district apply to the Local Agency Formation Commission (LAFCO). The application must detail the proposed district's boundaries and services, environmental effects, and financing methods.
- *Review and approval.* The LAFCO's staff studies the application, schedules the public hearing, and presents a public report with recommendations. The LAFCO can approve or deny the proposal. If the LAFCO approves, it's time to measure protests.
- *Protest hearing.* The LAFCO holds a second public hearing, this time to measure formal protests from voters and property owners. A majority protest stops the proposal, otherwise there's an election.
- *Election.* Only the voters inside the proposed district's boundaries vote at this election, which usually requires majority-voter approval. If the proposed new district relies on new special taxes, the measure needs 2/3-voter approval.
- *Formal filing.* If the voters approve the proposed district, the LAFCO's staff must file the formal documents needed to start the new district.

3. Who picks my district's governing board?

About 2/3 of our special districts are *independent*, that is, they have independently elected or appointed boards of directors. The other districts are *dependent* districts because they depend on another local government to govern them; usually a city council or a county board of supervisors. In most independent districts, registered voters elect the governing boards. In a few types of special districts, the landowners vote. Most governing boards have five members who serve staggered, four-year terms.

4. How can I find out who runs a special district?

The easiest way is to call your district directly and ask who serves on its governing board. Many districts have their own web sites. Also, your county clerk must keep a formal *Roster of Public Agencies* which lists all special districts along with the names and addresses of the members of their governing boards. Ask your county clerk for a copy of your county's *Roster*. This information may also be available on your county's web site.

5. Can a special district tax me without my approval?

No. Proposition 13 (1978) limited property taxes to 1% of property value. Many special districts get a share of these revenues. If a special district wants more tax revenues, it needs 2/3-voter approval before it can charge special taxes (also called "parcel taxes"). A general obligation bond that raises property tax rates also requires 2/3-voter approval.

6. But what about special assessments? Aren't they just like special taxes?

Not really. Special districts can charge benefit assessments to pay for public works like sewers, parks, and water systems, and to pay for some services. Property owners pay benefit assessments only for the projects or services that *directly* benefit their property. The amount of the assessment must be directly related to the benefit received. Proposition 218 (1996) required local governments, including special districts, to get weighted ballot approval from property owners before they can levy benefit assessments.

7. What can I do if I don't like what my special district is doing?

Talk to your district's general manager or the members of your district's governing board at their next meeting. All local governments must make time at their board meetings to listen to public comments. If you still aren't pleased with your district's activities, the remedy is direct democracy in the form of *initiative*, *referendum*, and *recall*.

- *Initiatives* let the voters propose ordinances directly instead of waiting for their district board to act. Successful initiatives need public notice, petitions, and majority-voter approval.
- *Referenda* also give voters a direct vote in district matters. The referendum power lets voters put recent board actions on the ballot and reject them *before* they go into effect. Referendum procedures are similar to the initiative process.
- *Recall* elections allow voters to remove elected board members before their terms of office end. Recalls follow processes similar to initiatives and referenda. However, recall isn't pos-

sible with cemetery districts and other special districts where the board members are appointed to serve fixed terms.

Or, you or your neighbors could run for the district's board at the next election.

8. Why do special districts seem so invisible?

Special districts often escape wide public attention because their functions are narrow and technical. Sometimes, residents don't pay attention to their special districts until something goes wrong. Like all local governments, however, special districts must conform to democratic safeguards such as the Brown Act, the Public Records Act, and the Political Reform Act.

9. How can I trust my special district's leaders?

It's true what they say --- *the noblest motive is the public good*. Public officials earn their constituents' trust by continually pursuing the public good. Special district officials must hold open meetings, keep open records, and disclose their economic interests. See the answer to Question 8, above. Most governing board members and key staff must take an ethics training course every two years. Ask your district if its board members and staff are up-to-date.

10. How do I know if my special district is doing OK?

It's also true that *good government demands the intelligent interest of every citizen*. Residents and property owners should pay attention to how public agencies, including special districts, pay for projects and programs. Besides attending your district's board meetings and following its web page, you can review a district's budgets, regular audits, and financial reports. Ask your county grand jury if it has investigated your district. In 2009-10, for example, the Lake County Civil Grand Jury reviewed the Lake County Vector Control District and then issued its findings and recommendations. Although it's not a perfect guarantee, ask if your special district participates in the Special District Leadership Foundation (SDLF) awards program.

11. What happens when things go bad?

If you're unhappy with a special district's programs or projects, take your complaints directly to the district's general manager and governing board. Local officials respond when their constituents write letters and speak up at board meetings. You can complain about economic conflicts of interest to the Fair Political Practices Commission. However, if you're aware of criminal activity, then you need to take your allegations to the district attorney or county grand jury for formal investigation.

12. Where can I get more information about special districts?

Local resources:

- LAFCO's municipal service reviews and spheres of influence.
- County clerk's *Roster of Public Agencies*.
- County grand jury reports on specific districts.

Statewide resources:

- State Controller's *Special Districts' Annual Report*.
- Special district associations. See Appendix B.

Current Topics & Emerging Trends

You now know that special districts are really diverse. Although it's tough to generalize about the trends affecting special districts, here are some general themes:

How many is too many? Special districts are California's most numerous type of local government. There's a lingering suspicion among the public and local officials that the number of special districts is growing. Some worry that increasing the number of independent special districts results in more bureaucracy and less efficiency.

However, using our definition of special districts, you can see that their numbers have actually gone down slightly over the last 30 years.

<u>Number of Special Districts</u>	
1977-78	3,398
1987-88	3,490
1997-98	3,336
2007-08	3,294

Inside that 3% decline are three interesting trends. *First*, the number of county service areas has grown. CSAs are dependent special districts, always run by the county boards of supervisors. The number of dependent districts increased while the overall number of special districts went down. *Second*, the number of community services districts has also grown. Almost always independent special districts, CSDs are often multi-purpose districts, delivering more than one local service. The number of single-function districts declined. *Third*, while the number of special districts went down, California's population grew by 2/3, from 22.4 million residents in 1977 to 37.7 million in 2007.

Changes in the Number of Special Districts Among the Ten Most Common Types

	<u>1977-78</u>	<u>2007-08</u>	<u>Change</u>
County service areas	727	895	+168
Fire protection districts	454	372	-82
Cemetery districts	263	252	-9
Community services districts	213	325	+112
County water districts	205	166	-39
California water districts	163	136	-27
Reclamation districts	157	156	-1
Resource conservation districts	139	96	-43
County sanitation districts	124	73	-51
Recreation & park districts	118	108	-10

This table shows that multi-purpose districts, like county service areas and community services districts, are more popular than they were three decades ago. The decline in the number of sin-

gle-purpose districts over the last 30 years shows that some of these districts have consolidated with each other or have combined into multi-purpose districts. For example, several smaller fire districts in Sacramento County consolidated over the years to form the Sacramento Metropolitan Fire District (Sacramento County) in 2000. Also in Sacramento County, the Consumnes Community Services District formed in 1985 as the successor to the Elk Grove Fire Protection District and the Elk Grove Recreation and Park District, and expanded in 2006 when it annexed the adjacent Galt Fire Protection District

Land use planning and development. Public policy, not public works, should determine the location, timing, and intensity of development. Counties and cities control land use within their own boundaries by adopting general plans and approving development projects. However, some critics say that special districts can block or distort local land use planning goals. Because special districts are major providers of water and sewer services, where (and when) they build water lines and sewer plants affects development. State law lets special districts override county and city general plans and zoning ordinances. Even though dependent special districts are governed by the same board or council that adopts the general plan, the majority of special districts have independent governing boards which may have different development ideas. Most independent districts work well with their city and county governments, but land use conflicts are possible.

Municipal service reviews. The 2000 report *Growth Within Bounds* by the Commission on Local Governance for the 21st Century prompted legislators to pass several statutory reforms, including new planning requirement for the Local Agency Formation Commissions (LAFCOs). To plan for the future boundaries and service areas of cities and special districts, a LAFCO must prepare informational reports called *municipal service reviews*, and then adopt a policy document for each city and district called a *sphere of influence*. LAFCOs' decisions on annexations and other boundary changes must be consistent with the spheres of influence that they adopt for the affected cities or districts.

To inform those policy choices, municipal service reviews analyze six topics:

- Growth and population projections.
- Present and planned capacity of public facilities and adequacy of public services.
- Agencies' financial abilities to provide services.
- Opportunities for sharing facilities.
- Accountability for community service needs.
- Other matters relating to effective or efficient services.

Preparing the initial round of municipal service reviews was hard for some of the LAFCOs and the special districts in their counties. Some districts resented what they thought was a LAFCO's intrusion into internal district operations. Some LAFCOs were surprised to discover that special districts provided more services in more areas than they had previously known. The municipal service reviews can be superb sources of basic information about special districts' operations, programs, facilities, and financing. Many LAFCOs post these service reviews on their websites.

Accountability and responsiveness. Good government is responsive government. Like many local agencies, special districts have worked harder in recent years to raise their public profile

and reassure their communities that they're spending public dollars wisely. Many districts belong to statewide associations that promote the special district form of government. See Appendix B for a list of those groups. These associations also offer training courses for special districts' board members and staff.

Although it's not a perfect guarantee of quality, you can ask your district if it has earned the "District of Distinction" designation from the Special District Leadership Foundation (SDLF). SDLF is a private, nonprofit group formed by statewide associations of special districts to encourage better governance practices. Has the SDLF awarded your district's board its "Recognition in Special District Governance"? Has your district's general manager earned SDLF's "Special District Administrator Certification"?

In addition to these voluntary programs, a state law passed in 2005 requires ethics training for local officials (including special districts) who accept compensation for their service. Special districts designate their employees who must also receive ethics training. Every two years these board members and key staff must receive at least two hours of training in general ethics principles and ethics laws. Records of who has taken the required training are public documents, so you can ask your district if its governing board and staff are up-to-date.

Revised state laws. Recognizing that the state laws that govern special districts were outdated, legislators have revised the statutes that control nearly 2/3 of all districts. Many of these principal acts were decades old and had not kept pace with other statutory and constitutional changes. For example, legislators had not overhauled the Public Cemetery District Law since 1939. In the meantime, the voters amended the California Constitution to limit property taxes, impose spending limits, and require more public approval of taxes, assessments, and fees. Other initiatives created the Political Reform Act and changed local officials' fiscal powers. The Legislature enacted and expanded the state laws on open meetings, public records, fiscal audits, special districts' boundaries, land use planning, and public finance.

The Senate Local Government Committee responded by convening working groups to review the state laws that govern six types of special districts. Legislators translated the results of the working groups' efforts into revised principal acts for fire protection districts (1987), recreation and park districts (2001), mosquito abatement and vector control districts (2002), cemetery districts (2003), community services districts (2005), and county service areas (2008). Appendix B lists the reports that explain these efforts.

Vestigial districts? Sometimes good ideas don't always work out the way you intended. In 1968, grand visions convinced legislators to pass the El Dorado County Toll Tunnel Act which allowed the county supervisors to form a new dependent special district. This District has the power to bore a tunnel through the Sierra Nevada from Twin Bridges to Meyers, under Highway 50's route over Echo Pass. Although that vision is unlikely to come true, more than four decades later, an inactive District still exists with the El Dorado County Board of Supervisors as its *ex officio* governing body.

Legislative experiments don't always deliver on their promises either. In 1961, the Legislature passed the Resort Improvement District Law to help land developers set up multi-function special districts to serve remote subdivisions in rural counties. In 1965, the Assembly held hearings into special districts' abuses and one result was to ban the formation of new resort improvement districts. Nevertheless, seven resort improvement districts in five counties remain in existence, including the dependent Stony Gorge Resort Improvement District (Glenn County). In 2010, the Legislature passed a bill making it easier to convert resort improvement districts into community services districts.

Appendix A: Types of Special Districts (2007-08)

County Service Areas	895
Fire Protection Districts	372
Community Services Districts	325
Cemetery Districts	252
County Water Districts	166
Reclamation Districts	156
California Water Districts	136
Recreation & Park Districts	108
Resource Conservation Districts	96
Irrigation Districts	94
Hospital Districts	80
County Sanitation Districts	73
Sanitary Districts	72
Public Utility Districts	54
Storm Water Drainage & Maintenance Districts	49
Mosquito Abatement & Vector Control Districts	46
Flood Control & Water Conservation Districts	42
Municipal Water Districts	37
Water Agency or Authority	30
County Waterworks Districts	28
Memorial Districts	27
Drainage Districts	23
Transit Districts	15
Levee Districts	14
Harbor & Port Districts	13
Library Districts	13
Water Conservation Districts	13
Airport Districts	10
Citrus Pest Control Districts	10
Water Storage Districts	8
Garbage Disposal Districts	8
Pest Control Districts	6
Municipal Improvement Districts	5
Municipal Utility Districts	5
Police Protection Districts	3
Sanitation & Flood Control Districts	2
Water Replenishment Districts	2
Sewer District	1
Bridge & Highway District	1
Joint Highway District	1
Metropolitan Water District	1
Separation of Grade District	1
Toll Tunnel Authority	<u>1</u>
TOTAL	3,294

Appendix B: Special District Information Resources

Association of California Water Agencies (ACWA)
910 K Street, Suite 100
Sacramento, California 95814-3512
(916) 441-4545
www.acwa.com

California Association of Local Agency Formation Commissions (CALAFCO)
1215 K Street, Suite 1650
Sacramento, California 95814
(916) 442-6536
www.calafco.org

California Association of Public Cemeteries
2640 Glen Ridge Road
Escondido, California 92027
(888) 344-9858
www.capc.info

California Association of Recreation & Park Districts
P.O. Box 22671
Sacramento, California 95822
(916) 446-2098
www.carpd.net

California Association of Sanitation Agencies (CASA)
1215 K Street, Suite 2290
Sacramento, California 95814
(916) 446-0388
www.casaweb.org

California Municipal Utilities Association (CMUA)
915 L Street, Suite 1460
Sacramento, California 95814
(916) 326-5800
www.cmua.org

California Special Districts Association (CSDA)
1112 "I" Street, Suite 200
Sacramento, California 95814
(916) 442-7887
www.csda.net

Fire Districts Association of California (FDAC)
 1215 K Street, Suite 2290
 Sacramento, California 95814
 (916) 231-2941
www.fdac.org

Mosquito & Vector Control Association of California
 1215 K Street, Suite 2290
 Sacramento, California 95814
 (916) 440-0826
www.mvac.org

Public Cemetery Alliance
 P.O. Box 494
 Gridley, California 95948
 (530) 846-2537
www.publiccemeteryalliance.com

Special District Leadership Foundation (SDLF)
 1112 "I" Street, Suite 200
 Sacramento, California 95814
 (916) 231-2939
www.sdlf.org



The library at UC Berkeley's Institute of Government Studies has an extensive collection of local government documents, including special districts' documents and many grand jury reports:

Institute of Governmental Studies
 University of California, Berkeley
 109 Moses Hall
 Berkeley, California 94720-2370
 (510) 642-1473
<http://igs.berkeley.edu/library/cagovdocs>

The Institute for Local Government (a joint program of the League of California Cities and the California State Association of Counties) provides helpful resources to local officials and their constituents:

Institute for Local Government
 1400 K Street, Suite 205
 Sacramento, California 95814
 (916) 658-8208
www.ca-ilg.org

The Senate Local Government Committee has compiled a descriptive list of the key state laws that affect local governments:

The Quick List: An Annotated Glossary of Local Government Statutes (Second Edition) Report 1353-S, February 2009.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/TheQuickList2009.pdf

The Committee has also published the statutory text and commentaries on the principal acts for six types of special districts:

A New Law for a New Mission: Senate Bill 515 and the “Fire Protection District Law of 1987” Report 284-S, October 1987.

[not available online]

Parks, Progress, and Public Policy: A Legislative History of Senate Bill 707 and the “Recreation and Park District Law” Report 1112-S, October 2001.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/PPPRReport.pdf

Science, Service, and Statutes: A Legislative History of Senate Bill 1588 and the “Mosquito Abatement and Vector Control District Law” Report 1226-S, September 2003.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/SSSFINALREPORT.pdf

For Years To Come: A Legislative History of SB 341 and the “Public Cemetery District Law” Report 1268-S, August 2004.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/YEARSTOCOME PUBLICATION.pdf

Community Needs, Community Services: A Legislative History of SB 135 (Kehoe) and the “Community Services District Law” Report 1348-S, March 2006.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/CNCSReport.pdf

Serving The Public Interest: A Legislative History of SB 1458 and the “County Service Area Law” Report 1428-S, October 2008.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/STPIPUBLICATION.pdf

You can order printed copies of these reports directly from Senate Publications & Flags, 1020 N Street (B-53), Sacramento, California 95814. Discounts are available for multiple copies, but credit cards are not accepted. For ordering details, you should call Senate Publications directly at (916) 651-1538.

Appendix C: Sources for Questions & Answers

What’s behind our answers to the “Frequently Asked Questions” on pages 12-14? Here are the references we used.

We list the statutes by code, followed by the section number. For example, “Government Code §56000, et seq.” means that you can find the text as Section 56000 of the Government Code. The term “et seq.” is the abbreviation for a Latin phrase that lawyers use to mean “and following.” That means a state law starts at §56000, but continues for several more sections.

You can retrieve a statute’s text from the Legislature’s official website: www.leginfo.ca.gov.

If you want to see printed versions, you can go to your public library or a law library and read the published codes. Two publishers print the California statutes: *West’s Annotated California Codes* and *Deering’s California Codes Annotated*. Be sure to start with the “pocket part” in back of each volume. The pocket section has the latest versions of the statutes, including any recent amendments.

Question 1: How can I find out if I live in a special district?

Various definitions of “special district” are in Government Code §16271 (d), Government Code §50077 (d), Government Code §53720 (b), Government Code §56036, and Revenue & Taxation Code §95 (m). Also see California Constitution Article XIII C, §1 (c) (Proposition 218).

Question 2: How can I form a special district?

The Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code §56000, et seq.) spells out the LAFCOs’ powers. The Senate Local Government Committee describes LAFCOs in *It’s Time To Draw The Line: A Citizen’s Guide to LAFCOs (2nd Edition)*. http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/LAFCOGUIDEUPDATE2003.pdf

Question 3: Who picks my district’s governing board?

The Uniform District Election Law (Elections Code §10500, et seq.) controls most special districts’ elections. Some independent special districts’ governing boards are appointed. For example, see Health & Safety Code §9020, et seq. which requires county supervisors to appoint residents as a public cemetery district’s board of trustees.

Question 4: How can I find out who runs a special district?

Government Code §53051 requires county clerks to keep the *Roster of Public Agencies*.

Question 5: Can a special district tax me without my consent?

Property taxes. California Constitution Article XIII A, §1 (a) (Proposition 13) limits the property tax rate to 1% and tells county officials to allocate the property tax revenues, following state law. Revenue & Taxation Code §95, et seq. tells county officials how to allocate property tax revenues to local governments, including special districts.

Special taxes. California Constitution Article XIII A, §4 (Proposition 13) and Article XIII C, §2 (a) & (d) (Proposition 218) require special districts to get 2/3-voter approval for special taxes. Government Code §50075, et seq. and Government Code §53720, et seq. (Proposition 62) spell out the statutory procedures for levying special taxes. Government Code §53727 tells special districts that they need specific statutory authority before they levy special taxes. State law gives special tax authority to many types of special districts. For example, Government Code §61121 allows community service districts to levy special taxes. The Senate Local Government Committee describes special districts' tax powers in *Revenues and Responsibilities: An Inventory of Local Tax Powers*.

http://senweb03.senate.ca.gov/committee/standing/LOCAL_GOV/REVENUESANDRESPONSIBILITIES.pdf

General obligation bonds. California Constitution Article XIII A, §1 (b) and Revenue & Taxation Code §93 allow local officials, including special districts, to charge extraordinary property tax rates outside the usual 1% limit to pay for general obligation bonds. State law allows many special districts to levy general obligation bonds, but only if they get 2/3-voter approval. For example, Public Resources Code §5790, et seq. spells out the procedures that recreation and park districts must follow to issue general obligation bonds.

Question 6: But what about special assessments? Aren't they just like special taxes?

California Constitution Article XIII D (Proposition 218) contains the requirements for benefit assessments. Government Code §53750, et seq. contains the procedures for local weighted ballots. State law allows many special districts to charge benefit assessments. For example, Government Code §25216.3 allows county service areas to use benefit assessments.

Question 7: What can I do if I don't like what my special district is doing?

Public meetings. California Constitution Article I, §3 (b) guarantees public meetings. The Ralph M. Brown Act (Government Code §54950, et seq.) requires local governments' meetings to be open and public, with only limited exceptions. Government Code §53954.3 tells local officials that they must give the public an opportunity to speak at public meetings. However, disorderly conduct isn't acceptable (Government Code §54957.9).

Direct democracy. Elections Code §9300, et seq. spells out the procedures for initiatives that affect special districts. Elections Code §9340, et seq. explains the referendum process for special districts. Elections Code §11000, et seq. contains the procedures for special districts' recall elections.

Question 8: Why do special districts seem so invisible?

Government Code §6250, et seq. is the Public Records Act.
Government Code §54950, et seq. is the Ralph M. Brown Act.
Government Code §81000, et seq. is the Political Reform Act.

Question 9: How can I trust my special district's leaders?

The "public good" slogan appears above the west portal of the San Diego County Administration Center, 1600 Pacific Highway, San Diego. Government Code §53234, et seq. requires compen-

sated district board members and key district staff to take ethics training every two years. The training records are public records.

Question 10: How do I know if my special district is doing OK?

The “good government” slogan appears above the east portal of the San Diego County Administration Center, 1600 Pacific Highway, San Diego.

Budgets. Many special districts’ principal acts require them to adopt annual budgets. For example, see Health & Safety Code §2070 for mosquito abatement and vector control districts.

Regular audits. Government Code §26909 requires county auditors to regularly audit special districts’ accounts and records.

Financial reports. Government Code §53890, et seq. requires special districts to annually report their financial transactions to the State Controller. Government Code §12463 requires the State Controller to compile and publish the special districts’ financial transactions reports. They’re available both as books and online: http://www.sco.ca.gov/ard_locarep_districts.html.

Grand jury reports. Penal Code §925 allows county grand juries to investigate special districts’ operations. Besides contacting your county grand jury to ask about recent reports, you can explore the collection assembled by UC Berkeley’s Institute for Governmental Studies: <http://cdm266301.cdmhost.com/cdm4/browse.php?CISOROOT=%2Fp266301coll6>.

Special District Leadership Foundation. The SDLF is a private nonprofit organization created by several special districts’ associations. More information is on its website: www.sdlf.org.

Question 11: What happens when things go bad?

California Constitution Article I, §3 (a) declares the public’s right to “instruct their representatives.” Government Code §54954.3 tells local officials that they must give the public an opportunity to speak at public meetings, but disorderly conduct isn’t acceptable (Government Code §54957.9). The Political Reform Act (Government Code §81000, et seq.) prohibits public officials from having economic conflicts of interest. The Fair Political Practices Commission’s webpage explains how to file complaints: www.fppc.ca.gov/index.php?id=498. Government Code §26500, et seq. explains that your county’s district attorney is the public prosecutor. Penal Code §925 allows your county grand jury to investigate special districts.

Sources & Credits

The following publications helped the Committee's staff prepare this Fourth Edition:

Commission on Local Governance for the 21st Century. *Growth Within Bounds*. Sacramento, California. 2000.

Senate Local Government Committee. *What's So Special About Special Districts?* First Edition (1991); Second Edition (1993), Third Edition (2002). Sacramento, California.

Sokolow, Alvin D., et al. *Choices for the Unincorporated Community: A Guide to Local Government Alternatives in California*. 2nd ed. Davis, California. 1981.

State Controller. *1977-78 Annual Report, Financial Transactions Concerning Special Districts of California*. Sacramento, California. 1978.

State Controller. *Special Districts Annual Report, Fiscal Year 2006-07*. Sacramento, California. 2008.

State Controller. *Special Districts Annual Report, Fiscal Year 2007-08*. Sacramento, California. 2010.



The Senate Local Government Committee first published *What's So Special About Special Districts?* in 1991, the result of a Senate Fellow project by April Manatt. After joining the Committee's staff, Manatt produced a Second Edition in 1993. In 2002, Kimia Mizany, another Senate Fellow, wrote the Third Edition. In 2010, the Committee's staff published this Fourth Edition. Peter Detwiler revised the text and Elvia Diaz produced the report. The Fourth Edition benefited from critical reviews by and helpful contributions from:

- David Aranda, North of the River Municipal Water District
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- Catherine Smith, California Association of Sanitation Agencies
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