

**RESOLUTION BY THE BUTTE COUNTY WATER COMMISSION  
SUPPORTING STUDY OF A PIPELINE TO CONNECT  
PARADISE IRRIGATION DISTRICT (PID) WITH AREAS IN AND AROUND THE CITY OF CHICO**

***Introduction***

**WHEREAS**, Groundwater, as a resource, is vital to the well-being of the environment, residents, economic stability and future growth of Butte County, particularly in areas where domestic and agricultural wells serve as the primary or only source of water for human consumption or irrigation of crops; and

**WHEREAS**, County-wide, the Butte County Department of Water and Resource Conservation has identified approximately 17,500 domestic, agricultural and municipal wells. Of these, the Vina Subbasin, which surrounds and includes the communities of Chico, Durham, Dayton and Nord, contains about 5,900, or 34% of the county total.<sup>1</sup> These wells include approximately 4,100 single-home domestic wells, 1,700 private agricultural wells, and 100 municipal and industrial wells, which are owned by California Water Service Company (CalWater). Many of the agricultural wells in the Vina Subbasin, which provide irrigation water to a majority of Butte County's orchard crops, are in close proximity to the City of Chico, whose residential needs are almost exclusively dependent upon groundwater supplied by CalWater; and

**WHEREAS**, The Butte County Water Commission, in addition to its statutory responsibility to regulate proposed transfers under Chapter 33 of the Butte County Code, also serves as an advisory body to the Butte County Board of Supervisors. In this capacity, the Commission seeks to inform the leadership and citizenry of the County in being good stewards of the water resources in our sphere of influence; and

***The Problems***

**WHEREAS**, During periods of drought, the hydrologic region in the Vina Subbasin, including the City of Chico, is subject to decreased rainfall, diminished groundwater recharge, and increased irrigation demands. While the groundwater situation in the subbasin remains comparatively strong, drought cycles in recent decades have contributed to a downward trend in groundwater levels, leading to decreased reliability of irrigation and domestic wells.<sup>2</sup> During California's last two critically dry years (2014-15) and in previous critically dry years (1991-92) individual domestic well owners in the Vina Subbasin experienced wells running dry, resulting in significant expense to restore water to their homes; and

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<sup>1</sup> Source: Kelly Peterson, Water Resources Scientist, Butte County Department of Water and Resource Conservation

<sup>2</sup> Source: Dr. Christina Buck, Assistant Director, Butte County Department of Water and Resource Conservation.

**WHEREAS**, Agriculture remains by far the leading industry in Butte County, bringing an average of \$700 million annually to the local economy, and one in five jobs in the County is directly attributed to agriculture.<sup>3</sup> Both the City of Chico and Butte County have demonstrated a long-term desire to protect agricultural land through their respective General Plans, zoning ordinances, and preservation of the Greenline.<sup>4</sup> Furtherance of this approach to development suggests that most new urban or suburban growth in or around the City will be in areas away from irrigated crop lands. Such development is unlikely to replace existing agricultural water uses, but will instead introduce new demands on the basin, requiring further conservation, reuse, or additional supplies; and

**WHEREAS**, The Sustainable Groundwater Management Act (SGMA, 2014) has empowered and required local agencies within California to manage groundwater basins in a sustainable manner over a long-term horizon for the benefit of the environment, industry and residents.<sup>5</sup> The California Constitution also requires that the water resources of the state, and by extension Butte County and the Vina Subbasin, be put to beneficial use to the fullest extent of which they are capable.<sup>6</sup> The groundwater basin underlying the Vina Subbasin is regulated under SGMA by the Vina Groundwater Sustainability Agency (GSA) and the Rock Creek Reclamation District GSA; and

**WHEREAS**, If no steps are taken to boost groundwater resources in the Vina Subbasin, usage could be significantly curtailed by one or more GSAs to the detriment of the local economy. SGMA prescribes that GSAs regulate water use within their boundaries in order to achieve “sustainable yield,” which can only be reached if the basin is not experiencing “undesirable results.”<sup>7</sup> The Department of Water Resources has also identified the Vina Subbasin as a “High Priority basin” for purposes of SGMA implementation, which requires balanced levels of pumping and recharge by 2040 or 2042.<sup>8</sup> Since this region has already experienced lower groundwater levels and subsequent reduction of storage, as well as potential surface water depletion during droughts, it is at least plausible that a final water budget will be smaller than what is currently used; and

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<sup>3</sup> Louie B. Mendoza Jr., Butte County Agricultural Commissioner, September 24, 2019 in a letter directed to Karen Ross, Secretary of the California Department of Food and Agriculture, available on page 3 of Butte County’s 2018 Crop and Livestock Report.

<sup>4</sup> 2030 Chico General Plan, Land Use Element; and Butte County General Plan 2030, Land Use Element (Adopted CR 10-152, October 26, 2010).

<sup>5</sup> Association of California Water Agencies (ACWA); “Sustainable Groundwater Management Act of 2014 – a Summary of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley).

<sup>6</sup> Article X, Section 2 (Added in 1928).

<sup>7</sup> These include lowering groundwater levels, reduction of storage, seawater intrusion, degraded quality, land subsidence, or surface water depletion [CA Water Code § 10721(x)].

<sup>8</sup> SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically overdrafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline [Source: California Department of Water Resources web page - “SGMA Groundwater Management,” (<https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>), Accessed 02-08-2020].

**WHEREAS**, In the aftermath of the devastating 2018 Camp Fire, Paradise Irrigation District lost more than 90% of its 10,500 customers, leaving it with approximately 10,000 acre feet of water per year which is not being used;<sup>9</sup> <sup>10</sup> and

### ***A Potential Solution***

**WHEREAS**, A pipeline intertie project involving Paradise Irrigation District (PID) and CalWater, in its Chico District, would create an opportunity for PID to supply unused water to the Chico Area to generate much-needed revenue through the exercise of its water rights via a contractual agreement with CalWater. If determined to be feasible in this context, the contractual agreement would provide long-term financial viability to PID, preserve local control of residential water service for the Town of Paradise, and would also strengthen groundwater supply reliability on the valley floor; and

**WHEREAS**, A PID-Chico intertie would help preserve existing surface water resources within Butte County since, otherwise, any unused balance of the district's raw water may be accessed by various riparian water right holders, or other purveyors,<sup>11</sup> before entering the Sacramento-San Joaquin River Delta, where it could be taken by pumps into the State Water Project for movement to Southern California; and

**WHEREAS**, PID's water treatment plant, located at Paradise Lake, is capable of converting more than 18 million gallons of water per day, which is more than adequate to treat any water supplied by PID to the Chico area.<sup>12</sup> Prior to the fire, this facility was operating at 50% capacity and there was room for PID's customer base to grow. But today, both the plant and the district's water rights generally are largely regarded as stranded assets. If allowed to provide valuable surface water off-ridge, these resources could be put to greater in-county use. This would also reduce CalWater's need to pump Chico-area groundwater to meet its service demands, which average around 18 million gallons per day;<sup>13</sup> and

**WHEREAS**, Due to physical limitations on both the output capacity of the PID treatment plant, as well as the intake capacity of CalWater's Chico system, preliminary estimates for the size of a proposed intertie pipeline have allowed for a potential annual capacity of 6,000 to 10,000 acre-feet per year.<sup>14</sup> Although conceptual, this range projects the intertie carrying between 5.35 and 8.92 million gallons per day, which would supply between 30 and 50 percent of Cal Water's existing Chico demand; and

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<sup>9</sup> Source: Paradise Irrigation District.

<sup>10</sup> One acre-foot of water is equal to 325,851 gallons, and typically serves, on average, between one and two households per year (Source: Water Education Foundation).

<sup>11</sup> Anyone may petition the State Water Resources Control Board to either revoke or revise that agency's previous declaration of a water right (23 CCR Statute 871).

<sup>12</sup> Source: Paradise Irrigation District.

<sup>13</sup> Source: California Water Service Company.

<sup>14</sup> These numbers are based on anecdotal, verbal information provided by PID and Cal Water.

**WHEREAS**, PID’s uncommitted water reserves prior to the Camp Fire, combined with those afforded by the district’s massive customer loss, allows that the district has well in excess of 10,000 acre-feet per year that could be marketed outside the district, with no adverse effects to its existing customer base.<sup>15</sup> It is therefore unlikely that any additional sources of water, beyond PID, would need to be secured in order to make use of an intertie for many years into the future.<sup>16</sup> As a future contingency however, other surface waters could theoretically be called upon; and

### **History**

**WHEREAS**, During Butte County’s most recent Critically Dry Years (2014), a concept similar to the current proposal was discussed by PID as a means of delivering water both uphill and downhill, depending on regional needs, but most urgently from the Chico area to PID as a drought solution for Paradise.<sup>17</sup> Then in March of 2018, as groundwater stakeholders in the Vina Subbasin began to actively collaborate and work toward strategies for achieving compliance with SGMA, CalWater made a preliminary report to the Vina Subbasin Governance Working Group that outlined several concepts for importing surface water, including a PID-Chico intertie.<sup>18</sup> At that time CalWater suggested the import of treated water from PID would alleviate their need to pump groundwater in the Vina Subbasin.<sup>19</sup> This was one of many ideas being considered by the working group for incorporation into a future Groundwater Sustainability Plan (GSP), which is due to the Department of Water Resources in 2022, as required by SGMA; and

**WHEREAS**, Following the Camp Fire, in September of 2019, the Butte County Board of Supervisors initiated, but later withdrew, support for a feasibility study that would have evaluated the practicality of building a PID-Chico intertie. The study was to be funded by a partnership between CalWater, PID, and Butte County. The County’s 50% cost share was to be sourced from Proposition 1<sup>20</sup> Groundwater Sustainability Plan (GSP) development grant funds the County Department of Water and Resource Conservation manages on behalf of all GSAs in the Vina, Wyandotte Creek, and Butte Subbasins, of which funds are no longer available. A primary goal of

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<sup>15</sup> Source: Paradise Irrigation District.

<sup>16</sup> Unofficial estimates for “rebuilding” the Town of Paradise range anywhere from 10 to 20 years and beyond – or never – but any new construction can be expected to have greater water efficiency than previously existed. It is therefore conceivable, using an average household size of 2.6 persons (US Census Bureau, 2018), and an optimistic annual consumption allotment of two households per acre-foot, that the population served directly by PID would need to increase *beyond* pre-fire numbers before a water shortage compelled intertie partners to seek additional sources. Using this formula, a returning population of 27,000 might use as little as 5,192.31 acre-feet, leaving a balance of more than 7,000 acre-feet of PID’s 12,300 total reserves.

<sup>17</sup> This information was provided to the Butte County Water Commission by Kevin Phillips, General Manager of PID, at the Commission’s regular monthly meeting on January 8, 2020. Phillips indicated that conservation efforts in the Town of Paradise in response to the drought, and other improvements to PID’s system, resulted in a sustainable (41%) water savings. Since critical drought conditions subsided shortly thereafter the concept was not developed further.

<sup>18</sup> This presentation (03-29-2018) was made in the form of a lecture, which included a PowerPoint presentation, delivered by Pete Bonacich and George Barber, who at the time were the outgoing and incoming District Managers for Cal Water Chico/Oroville, respectively ([https://www.youtube.com/watch?v=vzoxSC\\_IZR8](https://www.youtube.com/watch?v=vzoxSC_IZR8)), accessed 01/31/2020.

<sup>19</sup> According to Butte County Water and Resources Conservation staff, the 3,000 annual acre-feet of water available from Paradise at the time (prior to the Camp Fire) did not justify further investigation and the idea was shelved.

<sup>20</sup> Nov. 4, 2014 California General Election Ballot.

the feasibility study was to determine whether the PID-Chico intertie should be included in the Vina GSP; and

**WHEREAS**, On September 10, 2019, the County entered into a terminable contract with West Yost Associates, a construction management firm specializing in water and flood control infrastructure, to perform the feasibility study. The contract defined the Scope of Work as being to “evaluate the requirements for constructing a pipeline from Paradise to Chico,” and “evaluate the water rights that would be needed to permanently supply treated [*sic*] water via the Hendricks Canal to PID’s water treatment plant,”<sup>21</sup> while identifying the host of other issues that would need to be addressed.<sup>22</sup> The contract was terminated by the Board of Supervisors on November 5, 2019; and

**WHEREAS**, Following the Camp Fire on November 8, 2018, PID received two years of operating funds from the State of California contingent upon the district participating in a “consolidation study” to be arranged by the State Water Resources Control Board (State Water Board) and funded by the State; and

**WHEREAS**, On December 17, 2019, the Butte County Board of Supervisors asked the Butte County Water Commission “to review the intertie project.” Supervisors further stipulated the Commission should evaluate and consider “other surface water(s)” that may be transported through a PID-Chico intertie; and

**WHEREAS**, After the original charge by the Board of Supervisors on December 17, 2019, PID initiated its public outreach process for the aforementioned consolidation study required by the State of California as a precondition of the State’s disbursement of Camp Fire-related backfill funding. This study – which will take 6-18 months to complete – is projected to examine a broad range of options on how PID can maintain its infrastructure and operations in the future. PID and the State Water Board have agreed to have the study evaluate possible consolidation with neighboring water agencies, as well as other options for the district to secure long-term fiscal viability. The study will consider PID fees, operations, and potential revenue generating projects, such as acquisition of the PG&E DeSalba/Miocene Canal project and the PID-Chico intertie. California State University, Sacramento will administer the study on behalf of the State Water Board beginning in early 2020 using an extensive public engagement process. Since the study will cover more than just district consolidation options, it is being referred to as the “PID Sustainability Study;” and

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<sup>21</sup> The Hendricks canal would supply raw, untreated water to the plant.

<sup>22</sup> These included: A discussion of fire hydrants along the route for fire suppression, volatile organic compound (VOC) issues and impacts, environmental documentation and permitting requirements, temporary construction easements, conceptual-level cost estimates, as well as the identification of the future investigations needed to proceed to the design phase of the project.

***Public Comments***

**WHEREAS**, Both the Butte County Water Commission and Board of Supervisors have heard many comments from the public regarding the intertie proposal during regular meetings, both favorable and unfavorable. Common objections include various concerns that the import and utilization of treated surface water will encourage privatization of the groundwater basin surrounding Chico, giving way to exports of groundwater from Butte County and subsequent degradation of the aquifer. Others have expressed concern that residents of Paradise or Chico may lose water rights to Cal Water or other parties permanently as a result of the proposal becoming reality. And finally, some have expressed concerns that the existence of an intertie, by bringing treated water through areas currently lacking service, or augmenting available groundwater in the Vina Subbasin, will induce unhealthy suburban growth along the path of the proposed intertie or in the Chico area generally. Any development or execution of the intertie proposal will clearly need to be conducted in an open, public manner that listens to, informs and protects all stakeholders; and

***Resolutions***

**NOW, THEREFORE, BE IT RESOLVED**, that the Butte County Water Commission makes the following recommendation to the Board of Supervisors, that they support the concept of the Intertie Project as one of the options to be included in the PID Sustainability Study to be conducted by the State of California.

**PASSED AND ADOPTED** by the Butte County Water Commission this 4<sup>th</sup> day of March, 2020, by the following vote:

**AYES:** Commissioners Skinner, Kimmelshue, Harriman, Tennis, Washington, Roethler and Grover

**NOES:** None

**ABSENT:** Commissioners Jones and Nicholas

**NOT VOTING:** None

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**David Skinner**, Chair  
Butte County Water Commission