HUMBOLDT COMMUNITY SERVICES DISTRICT
BOARD OF DIRECTORS
REGULAR SCHEDULED MEETING

AGENDA

DATE: **Tuesday, June 24, 2025**

TIME: **5:00 p.m.**

LOCATION: **5055 Walnut Drive, Eureka, CA**

The HCSD Boardroom is open to the public during the meeting's open session segment. This meeting is also held by video/teleconference, per CA Govt Code § 54953(b). If a member of the public cannot attend in person and would like to speak on an agenda item, including Public Participation, please join through the Zoom website (https://zoom.us) by entering Meeting ID 388 963 6754 and Passcode 202520. Access may also be achieved via telephone only by dialing 1-669-900-9128.

A. ROLL CALL

Directors Benzonelli, Gardiner, Hansen, Matteoli, Ryan

B. PLEDGE OF ALLEGIANCE

C. CONSENT CALENDAR

1. Approval of June 24, 2025 Agenda — *Pgs. 1-2*
2. Approval of Minutes of the Regular Meeting of June 10, 2025 — *Pgs. 3-8*

D. REPORTS

1. General Manager
   a) District Update — *Pgs. 9-10*
2. Finance Department
   a) May 2025 Budget Statement — *Pgs. 11-22*
3. Engineering
   a) Update — *Pgs. 23-24*
4. Planning
   a) Update — *Pgs. 25*
5. Legal Counsel

6. Director Reports

7. Other

E. PUBLIC PARTICIPATION

Members of the public may comment on items not on the agenda. Please use the information above to participate via Zoom. The Board requests that speakers state their name and where they are from, be concise, and limit communications to 3 to 5 minutes. After all oral communications, the Board or staff may briefly respond with information to comments; however, the Brown Act prohibits discussion of matters not on the published agenda. Matters requiring discussion or action will be placed on a future agenda.

F. NEW BUSINESS

1. Consideration of Fiscal Year 2025/26 Salary Adjustment for HCSD's Non-represented (Management) Employees *Pgs. 27*
2. Consideration of Revisions to HCSD's Cross-Connection Control Program *Pgs. 29-90*
3. Consideration of Adopting the 2025 Annual Water Supply Demand Report for the Department of Water Resources *Pgs. 91-112*
4. Consideration of Changing Existing Monthly Gym Membership Reimbursement to an Annual Wellness Benefit *Pgs. 113*
5. Consideration of Canceling the Regular Meeting on July 8, 2025 *Pgs. 115*

G. OLD BUSINESS

1. Consideration of Adopting Resolution 2025-07 Establishing Appropriation Limits for Fiscal Year 2025/26 *Pgs. 117-120*
2. Consideration of Adopting Fiscal Year 2025/26 Capital Improvement Plan (CIP) *Pgs. 121-144*

H. ADJOURNMENT

Next Res: 2025-08
Next Ord: 2025-01

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Robert Christensen at (707) 443-4558, ext. 210, or by email at asm@humboldtcsd.org. Notification 48 hours before the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting (28 CFR 35.102 – 35.104 ADA Title II).

Pursuant to §54957.5(a) of the California Government Code, any public record writings relating to an agenda item for an open session of a regular meeting of the Board of Directors, not otherwise exempt from public disclosure, are available for public inspection upon request at the District offices located at 5055 Walnut Drive, Monday through Friday (holidays excepted) during regular business hours.

DRAFT MINUTES OF THE REGULAR MEETING
OF THE BOARD OF DIRECTORS OF THE
HUMBOLDT COMMUNITY SERVICES DISTRICT

The Humboldt Community Services District Board of Directors met in regular session at 5:00 p.m. on Tuesday, June 10, 2025, at 5055 Walnut Drive, Eureka, California, and 50 Via Ravello, Henderson, Nevada, with public participation available via Zoom tele/video conference.

A. CALL TO ORDER AND ROLL CALL

Present upon roll call: Directors Benzonelli, Gardiner (remote), Hansen, Matteoli, and Ryan. Staff in attendance: General Manager Williams (GM), Finance Manager Montag (FM), and Assistant Engineer Rawal (AE).

B. PLEDGE OF ALLEGIANCE

President Matteoli invited those present to join in the Pledge of Allegiance.

C. CONSENT CALENDAR

1. Approval of June 10, 2025 Agenda
2. Approval of Minutes of the Regular Meeting of May 27, 2025

IT WAS MOVED BY DIRECTOR HANSEN, SECONDED BY DIRECTOR RYAN, TO APPROVE THE JUNE 10, 2025, CONSENT CALENDAR. MOTION CARRIED UPON THE FOLLOWING ROLL CALL VOTE:

AYES: BENZONELLI, GARDINER, HANSEN, MATTEOLI, RYAN
NOES: NONE
ABSENT: NONE

D. CORRESPONDENCE

1. LAFCo Budget for Fiscal Year 2025-26

E. REPORTS

1. General Manager

a) District Update

GM reported that the Hoover Sewer Lift Station (SLS) Flood Resistance Project is a grant-funded project by FEMA to mitigate flood impacts. The project is currently in the design phase, and geotechnical borings are required to complete the design. Before the boring operation can commence, a permit or waiver must be issued by the California Coastal Commission (CCC). A hearing for the permit will occur at the July CCC meeting. Notifications of the hearing have been posted at the site.

A Coastal Conservancy-funded project, *FLKS Living With Water*, coordinated community meetings in Fields Landing on June 7 and King Salmon on June 8 to speak with residents about local flooding in their communities. HCSD staff and representatives from other local agencies and organizations attended the meetings, including: Humboldt Bay Harbor, Recreation and Conservation District; Humboldt County Planning and Public Works Departments; California Coastal Commission; Humboldt Water Keeper; GHD Consulting; and Cal Poly Humboldt. During the meeting, attendees walked the neighborhoods and highlighted areas of concern during flooding.

2. Finance Manager

   a) May 2025 Check Register

   FM reviewed the Check Register and highlighted the following purchases: a payment to Keenan Supply for materials associated with the Crane Street Steel Main Replacement, a payment to US Bank for the District's 2014 wastewater revenue bond, a payment to Whitchurch Engineering for engineering services on the Doctor's Office Lane Sewer Rehabilitation Project, a payment to Sage Design for equipment associated with the upgrades to the District's SCADA system and a payment to Sanders Roofing for the roof rehabilitation project on the vehicle storage area and break room.

3. Engineering

   a. Update

   AE reported that the District experienced a sanitary sewer spill at the cross streets of Herrick and Noe Avenues on June 4th. The spill occurred for twenty minutes, releasing 750 gallons of sewage. No wastewater entered any drainage system or surface water bodies. Four vacuum trucks, two from the City of Eureka and two District trucks, were onsite to relieve flow from the damaged pipe so the system could be repaired. 100 gallons of the overflow was recovered and returned to the sewer system. Remaining overflow was absorbed into vegetated areas in the public right-of-way. The District excavated to a depth of nine feet and replaced the failed portion of the asbestos cement pressure sewer main. A report was completed and provided to the California Integrated Water Quality System within 48 hours.

4. Planning

   No report.

5. Legal Counsel

No report.

6. Director Reports

Director Ryan wished everyone a happy Pride Month. Director Ryan has been working with other Redwood Regional Economic Development Commission Board Members to update the organization's charter and guiding principles.

F. PUBLIC PARTICIPATION

None.

G. NEW BUSINESS

1. City of Eureka 20-Year Capital Improvement Plan (CIP) Presentation

Jesse Willor, Engineer for the City of Eureka (CoE), presented the City's 20-year Wastewater Capital Improvement Plan for the Wastewater Treatment Plant (WWTP) and other shared wastewater facilities. The CIP includes two types of projects: Maintenance Projects and projects required by the City's wastewater discharge permit. Maintenance projects include: wastewater collection, the crosstown interceptor, biosolids dewatering, sewer lateral replacement projects, and phase two of the WWTP's heat and power project.

Elk River WWTP was commissioned and permitted in 1984. At the time, the permitting agency allowed bypassing secondary treatment during wet high weather flow. In 2016, a new permit was granted with requirements to eliminate this practice and to comply with the state's Enclosed Bays and Estuaries Policy (EPEB). The first step, the eliminate bypass project is expected to cost $20 million and be completed in Fall 2027. Full compliance with the EPEB is mandated by 2042.

The City is considering seeking an exception to the Enclosed Bays and Estuaries Policy, but has also analyzed alternative projects, including an ocean outfall with an estimated cost of $225-270 billion. Willor noted that the city would need to seek outside funding for an ocean outfall project, and the costs alone could not be handled by the City and the District. Director Benzonelli asked if a regional project could be considered. City Engineer Willor responded that he has contacted the City of Arcata to gauge interest in a regional project.
it could be planned for.

2. Consideration of the Employee Negotiation Ad Hoc Committee Recommendation

GM summarized the Employee Association (EA) requests and negotiations between the appointed Ad Hoc and the EA representatives. After negotiating with

the EA representatives the Ad Hoc Committee recommend the following to the Board for consideration:

a) Three percent (3%) Cost of Live Adjustment (COLA)
b) A 10% increase to Standby Duty Pay, increasing weekday pay from $45.00 to $49.50 and weekend/holiday pay from $75.00 to $82.50.
c) Adjust step 1 of each classification by $0.10 in lieu of a uniform/clothing allowance.

Director Benzonelli reported that during negotiations, the EA recommended changing the consumer price index (CPI) that the District uses from the Western States CPI to the Eureka CPI, which is produced by the Humboldt Economic Index at Cal Poly Humboldt. After researching various indices, Director Benzonelli reached out to economic development organizations to discuss creating a regional economic index that would more accurately reflect regional costs. In subsequent negotiations, the District and the EA may agree to use a different CPI to determine cost-of-living adjustments. HCSD EA President, Chris Armstrong, was present and addressed the board about the association's requests.

PUBLIC COMMENT: None

IT WAS MOVED BY DIRECTOR RYAN, SECONDED BY DIRECTOR BENZONELLI, TO INSTRUCT THE GM TO ENTER A MEMORANDUM OF UNDERSTANDING (MOU) WITH CSD EMPLOYEE ASSOCIATION MEMBERS FOR FISCAL YEAR 2025/26 PROVIDING A 3% COLA, A 10% INCREASE TO STANDBY DUTY PAY, AND A $0.10 HOURLY INCREASE TO THE INITIAL STEP OF EACH CLASSIFICATION OF REPRESENTED EMPLOYEES. MOTION CARRIED UPON THE FOLLOWING ROLL CALL VOTE:

AYES: BENZONELLI, GARDINER, HANSEN, MATTEOLI, RYAN
NOES: NONE
ABSENT: NONE

3. Review, Consider Fiscal Year 2025/26 Draft Capital Improvement Plan (CIP) Tables

GM reported that the District's CIP program is updated annually to reflect the District's planned spending for rehabilitation and improvement projects to support infrastructure and facilities over a five-year period with 10 and 20 year projected spending estimates to assist with long term financial planning. GM reviewed some of the ongoing projects and noted that some projects had been rescheduled and combined with future projects so that the District may take advantage of lower unit and mobilization costs associated with larger projects. The tables will be presented with the Draft CIP at the June 24 meeting for approval.

4. Review of Employee Reimbursements for Fiscal Year 2024/25

   FM summarized the annual disclosure for reimbursements to employees.

   PUBLIC COMMENT: None

   IT WAS MOVED BY DIRECTOR BENZONELLI, SECONDED BY DIRECTOR HANSEN, TO APPROVE DISCLOSURE OF EMPLOYEE REIMBURSEMENTS FOR FISCAL YEAR 2024/25. MOTION CARRIED UPON THE FOLLOWING ROLL CALL VOTE:

   AYES: BENZONELLI, GARDINER, HANSEN, MATTEOLI, RYAN
   NOES: NONE
   ABSENT: NONE

5. Review of Appropriations Limit for Fiscal Year 2025/26

   FM reviewed the Appropriations Limit for Fiscal Year 2025/26 with the Board. Each year, the California Constitution requires the District to recalculate the tax proceeds for the annual appropriation limit. The calculation for this year provides a limit of $562,265. The projected tax revenue is $450,000, which is below the appropriation limit. The Board discussed the current allocation of property taxes to the District. GM explained that the District is limited to collecting property taxes from assessed parcels within the District boundaries when the property tax reform was enacted. FM noted that the District will approve the appropriations limit at the subsequent meeting.

H. NEW BUSINESS

1. Consideration of Adopting Resolution 2025-06 Establishing a Budget and Updated Master Rate and Charge Schedule for Fiscal Year 2025/26

   FM reviewed changes to the Draft Budget since the May 27, 2025, meeting. The FM and GM carefully reviewed the proposed water and sewer rate increase for Fiscal Year 2025/26. They identified specific capital improvements that could be delayed and/or potentially receive outside funding. Staff reduced the recommended sewer rate increase from 14% to 10%.

   The Board discussed the impact of rate increases on residents with fixed and low incomes.

PUBLIC COMMENT: None

IT WAS THEN MOVED BY DIRECTOR BENZONELLI, SECONDED BY DIRECTOR HANSEN, TO ADOPT RESOLUTION 2025-06 ESTABLISHING A BUDGET AND UPDATED MASTER RATE AND CHARGE SCHEDULE FOR FISCAL YEAR 2025/26. MOTION CARRIED UPON THE FOLLOWING ROLL CALL VOTE:

AYES: BENZONELLI, GARDINER, HANSEN, MATTEOLI, RYAN
NOES: NONE
ABSENT: NONE

I. ADJOURNMENT

Without further business**, IT WAS MOVED BY DIRECTOR BENZONELLI, SECONDED BY DIRECTOR RYAN,** TO ADJOURN. MOTION CARRIED UPON THE FOLLOWING ROLL CALL VOTE:

AYES: BENZONELLI, GARDINER, HANSEN, MATTEOLI, RYAN
NOES: NONE
ABSENT: NONE

THE BOARD ADJOURNED ITS REGULAR MEETING OF May 27, 2025 AT 6:31 P.M.

_____
Submitted, Board Secretary

MEMORANDUM

TO: Board of Directors

FROM: Terrence Williams, General Manager

DATE: June 20, 2025

SUBJECT: General Manager Report for June 24, 2025 Board Meeting

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Project Proponent Updates

Elk River/Humboldt County
December 10, 2024, the District Board voted to approve and support of the County's application for technical assistance from the California Drinking Water State Revolving Fund. The subject of the study is drinking water for upper Elk River Road, outside of the District's current boundary. One potential path forward that is being considered is extension of the District's water system to serve existing parcels. The County was awarded the grant and is beginning work on the study with consultants S2S and Verdantas with oversight from California Urban Water Agencies (CUWA) and Brown and Caldwell (who is under contract to CUWA). The study is currently in the planning and information gathering phase. Staff from HCSD met with the County, consultants and CUWA on June 12, 2025 to discuss the work plan and meet the people that will be performing the study.

Mid-McKay
On December 11, 2024, District staff met with representatives of Green Diamond Resource Company and Laco Associates to discuss a potential annexation of about 100 acres near the intersection of Campton Road and Walnut Drive adjacent to the current District boundary. Green Diamond currently owns the property and has been working with the County to adjust the zoning to residential with a small amount of neighborhood commercial. The discussion in December included water and sewer service considerations as well as the path to annexation into the District. Considering that Green Diamond is not planning to develop the property, development plans and annexation would ultimately be the responsibility of a future land owner.

Recently, on June 11, 2025, representatives of Green Diamond, Laco and Associates, Humboldt County, Humboldt Local Agency Formation Commission (Humboldt LAFCo) and HCSD met to discuss updates to the process. Green Diamond requested that HCSD provide capacity information relevant to the potential developments in the area. An additional parcel was included for discussion near the intersection of Harris Street and Godard Court. This

property is about 35 acres and adjacent to the District's boundary. Several of the properties that Green Diamond proposes to annex will require the addition of water storage at the Ridgewood Tank site. All of the proposed development will require the Hemlock Reversal project to be completed before they can be provided wastewater services.

North McKay Ranch
On April 8, 2025, the Board of Directors voted to proceed with annexation of the North McKay Ranch Subdivision properties. The process to move the application forward with Humboldt LAFCo is proceeding. District staff provided a two-year extension to the project proponent for construction activities associated with capacity charges that were paid in September, 2023, for two parcels at the end of Manzanita Street.

Humboldt Hill Land and Cattle
On June 4, 2025, District staff met with the project proponent's consultant, Kevin McKenny, to discuss a proposed project near the Donna Drive Tank site. The project will require a water booster station and a mainline extension agreement with the project proponent. The property will also need to be annexed into the District before they can be served.

There is a lot of interest by property owners in developing land adjacent to the District. This does not necessarily translate into new construction. All of these projects will require a significant investment in new infrastructure before they can feasibly be developed.

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
FOR ENTIRE DISTRICT

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance	Note
OPERATING REVENUE							
Metered Water Sales	6,115,000	451,647	5,365,044	5,605,417	(240,373)	(4.3)	
Sewer Service Charges	8,315,000	676,859	7,420,843	7,622,083	(201,240)	(2.6)	
Water & Sewer Construction Fees	66,000	-	28,580	60,500	(31,920)	(52.8)	1
Account Fees	75,000	8,818	109,211	68,750	40,461	58.9	
Inspection Fees	700	-	464	642	(178)	(27.7)	1
Reimbursable Maintenance Fees	1,600	-	25	1,467	(1,442)	(98.3)	1
Miscellaneous	2,000	84	1,213	1,833	(620)	(33.8)	1
TOTAL OPERATING REVENUE	14,575,300	1,137,408	12,925,380	13,360,692	(435,312)	(3.3)	
NON-OPERATING REVENUE							
Capital Connection Fees	285,000	2,493	105,243	261,250	(156,007)	(59.7)	1
Interest/General	80,000	47,820	384,223	73,333	310,890	423.9	2
Discounts Earned	1,750	-	650	1,604	(954)	(59.5)	1
Sales:Fixed Assets/Scrap Metal	2,000	62	14,142	1,833	12,309	671.4	1
Bad Debt Recovery	3,000	-	900	2,750	(1,850)	(67.3)	1
Property Taxes & Assessments	450,000	-	-	412,500	(412,500)	(100.0)	1
TOTAL NON-OPERATING REVENUE	821,750	50,376	505,159	753,271	(248,112)	(32.9)	1
TOTAL DISTRICT REVENUE	15,397,050	1,187,784	13,430,539	14,113,963	(683,424)	(4.8)	
OPERATING EXPENSES							
Wages Direct	1,950,000	155,081	1,623,104	1,787,500	164,396	9.2	
Benefits: PERS	550,000	17,483	519,869	504,167	(15,702)	(3.1)	
Group Ins	1,265,000	100,715	1,041,990	1,159,583	117,594	10.1	
Workers Comp Ins	31,000	7,239	21,561	28,417	6,856	24.1	
FICA/Medicare	141,000	11,944	125,128	129,250	4,122	3.2	
Misc Benefits	640	100	275	587	311	53.1	
Total Wages and Benefits	3,937,640	292,563	3,331,927	3,609,503	277,576	7.7	
Less: wages & ben charged to Capital Proj.	(300,000)	(46,677)	(369,561)	(275,000)	94,561	(34.4)	
Total Operating Wages and benefits	3,637,640	245,886	2,962,367	3,334,503	372,137		
Water Purchase HBMWD	1,175,000	95,031	1,052,303	1,077,083	24,781	2.3	
Water Purchase Eureka	850,000	60,968	674,123	779,167	105,044	13.5	
Sewage Treatment Operations & Maint.	1,900,000	168,480	1,853,280	1,741,667	(111,613)	(6.4)	
Water/Sewer Analysis	10,000	561	9,857	9,167	(691)	(7.5)	
Supplies/ Construction	160,000	16,345	114,888	146,667	31,779	21.7	
Supplies/ Office-Administration	15,000	1,652	10,421	13,750	3,329	24.2	
Supplies/ Engineering	1,500	-	593	1,375	782	56.9	
Supplies/ Maintenance	110,000	21,100	76,079	100,833	24,755	24.5	
Invoicing	60,000	5,615	62,012	55,000	(7,012)	(12.7)	3
Temporary Labor	44,500	5,080	90,567	40,792	(49,776)	(122.0)	4
Repairs & Maintenance/Trucks	63,000	3,506	70,116	57,750	(12,366)	(21.4)	5
Equipment Rental	2,000	-	-	1,833	1,833	100.0	
Building & Grounds Maintenance	30,000	2,104	35,109	27,500	(7,609)	(27.7)	6
Electrical Power	500,000	29,686	384,381	458,333	73,953	16.1	
Street Lights	105,000	6,444	70,693	96,250	25,557	26.6	
Telephone	16,000	1,329	19,614	14,667	(4,947)	(33.7)	7
Postage	850	382	2,883	779	(2,103)	(270.0)	8
Freight	1,000	494	856	917	60	6.6	
Chemicals	12,000	2,026	11,249	11,000	(249)	(2.3)	
Liability Insurance	100,500	-	133,725	92,125	(41,600)	(45.2)	9
Legal	70,000	724	7,580	64,167	56,587	88.2	
Accounting	15,000	-	18,658	13,750	(4,908)	(35.7)	10
Engineering	1,000	-	939	917	(23)	(2.5)	15

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
FOR ENTIRE DISTRICT

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance	Note
Other Professional Services	93,000	6,400	16,098	85,250	69,152	81.1	
Bank Service Charges	15,000	1,363	19,615	13,750	(5,865)	(42.7)	11
Transportation	75,000	9,034	62,714	68,750	6,036	8.8	
Office Equip. Maintenance	4,300	201	4,806	3,942	(864)	(21.9)	12
Computer Software Maintenance	39,500	2,679	47,360	36,208	(11,152)	(30.8)	13
Memberships & Subscriptions	31,000	2,484	26,481	28,417	1,936	6.8	
Bad Debts & Minimum Balance Writeoff	32,000	-	(6)	29,333	29,339	100.0	
Conference & Continuing Ed	28,000	-	5,067	25,667	20,600	80.3	
Certifications	5,500	-	5,193	5,042	(151)	(3.0)	
State/County & LAFCO Fees and Charges	57,500	768	41,869	52,708	10,839	20.6	
Hydraulic Water Model Maintenance	2,000	-	-	1,833	1,833	100.0	
Elections Expense	20,000	-	16,881	18,333	1,453	7.9	
Human Resources	25,500	4,055	14,891	23,375	8,484	36.3	
Miscellaneous	10,000	54	323	9,167	8,844	96.5	
Director's Fees	16,000	1,150	11,300	14,667	3,367	23.0	
TOTAL OPERATING EXPENSES	9,334,290	695,602	7,934,886	8,556,433	621,547	7.3	
LONG TERM DEBT PAYMENTS							
Safe Drinking Water Bond	-	-	-	-	-	-	
2012 CIP & Refi.	177,600	-	177,600	162,800	(14,800)	(9.1)	14
Davis-Grunsky Loan	6,050	72	6,045	5,546	(500)	(9.0)	14
VacCon Truck Loan	117,441	-	117,441	107,654	(9,787)	(9.1)	14
2014 Wastewater Revenue Bonds	486,575	-	486,575	446,027	(40,548)	(9.1)	14
TOTAL LONG TERM DEBT PAYMENTS	787,666	72	787,661	722,027	(65,634)	(9.1)	
CAPITALIZED EXPENDITURES							
Vehicles, Rolling Stock & Equipment	129,500	1,688	46,242	118,708	72,466	61.0	
Building, Yard & Paving Improvements	395,000	4,121	90,444	362,083	271,639	75.0	
Capital Improvements Water	2,105,700	199,614	991,817	1,930,225	938,408	48.6	
Capital Improvements Sewer	2,096,500	27,580	756,305	1,921,792	1,165,487	60.6	
TOTAL CAPITAL EXPENDITURES	4,726,700	233,004	1,884,809	4,332,808	2,448,000	56.5	
OTHER							
City of Eureka Projects:							
Treatment Plant	698,000	-	-	639,833	639,833	100.0	
TOTAL City of Eureka Projects	698,000	-	-	639,833	639,833	100.0	
Interfund Transfers In	-	-	-				
Interfund Transfers Out	-	-	-				
BUDGET SURPLUS (DEFICIT)	(149,606)	259,106	2,823,183	(137,139)	2,960,322	2,158.6	

HUMBOLDT COMMUNITY SERVICES DISTRICT
SUMMARY BUDGETARY STATEMENT OF REVENUE AND EXPENSES
FOR ENTIRE DISTRICT

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to Date	Y.T.D. Variance Actual to Budget	% Variance
OPERATING REVENUE & EXPENSES						
TOTAL OPERATING REVENUE	14,575,300	1,137,408	12,925,380	13,360,692	(435,312)	(3.3)
TOTAL OPERATING EXPENSES	(9,334,290)	(695,602)	(7,934,886)	(8,556,433)	621,547	7.3
NET SURPLUS/(DEFICIT) FROM OPERATIONS	5,241,010	441,806	4,990,494	4,804,259	186,235	3.9
NON-OPERATING REVENUE & EXPENSES						
TOTAL NON-OPERATING REVENUE	821,750	50,376	505,159	753,271	(248,112)	(32.9)
TOTAL LONG TERM DEBT SERVICE	(787,666)	(72)	(787,661)	(722,027)	(65,634)	(9.1)
SURPLUS/(DEFICIT) BEFORE CAPITAL EXPENDITURES	5,275,094	492,110	4,707,991	4,835,503	3,757	0.1
HCSD CAPITAL IMPROVEMENT EXPENDITURES	(4,726,700)	(233,004)	(1,884,809)	(4,332,808)	2,448,000	56.5
CITY of EUREKA PROJECT REIMBURSEMENT	(698,000)	-	-	(639,833)	639,833	100.0
NEW DEBT ISSUE						
NET INTERFUND TRANSFERS IN/OUT		-	-			
BUDGET SURPLUS (DEFICIT)	(149,606)	259,106	2,823,183	(137,139)	2,960,322	2,158.6

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
Water Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
OPERATING REVENUE						
Metered Water Sales	6,115,000	451,647	5,365,044	5,605,417	(240,373)	(4.3)
Water Construction Fees	45,000	-	16,035	41,250	(25,215)	(61.1)
Account Fees	40,000	4,971	62,250	36,667	25,583	69.8
Inspection Fees	-	-	-	-	-	-
Reimbursable Maintenance Fees	1,400	-	14	1,283	(1,269)	(98.9)
Miscellaneous	1,000	48	473	917	(444)	(48.4)
TOTAL OPERATING REVENUE	6,202,400	456,666	5,443,817	5,685,533	(241,717)	(4.3)
NON-OPERATING REVENUE						
Water Capital Connection Fees	190,000	-	39,181	174,167	(134,986)	(77.5)
Interest/General	40,000	17,268	182,256	36,667	145,590	397.1
Discounts Earned	1,000	-	371	917	(546)	(59.6)
Sales:Fixed Assets/Scrap Metal	1,000	35	8,061	917	7,144	779.4
Bad Debt Recovery	2,000	-	513	1,833	(1,320)	(72.0)
FW/MR Assessment	-	-	-	-	-	-
Other Non-Operating Revenue	-	-	-	-	-	-
TOTAL NON-OPERATING REVENUE	234,000	17,304	230,382	214,500	15,882	7.4
TOTAL DISTRICT REVENUE	6,436,400	473,969	5,674,199	5,900,033	(225,835)	(3.8)
OPERATING EXPENSES						
Wages Direct	905,000	30,180	792,645	829,583	36,938	4.5
Wages & Benefits: Allocated	742,820	80,143	622,655	680,918	58,264	8.6
Benefits: PERS	130,000	6,215	103,343	119,167	15,823	13.3
Group Ins	360,000	25,599	341,390	330,000	(11,390)	(3.5)
Workers Comp Ins	17,000	3,805	11,044	15,583	4,540	29.1
FICA/Medicare	65,000	2,302	60,564	59,583	(981)	(1.6)
Misc Benefits	-	-	-	-	-	-
Total Wages and Benefits	2,219,820	148,243	1,931,641	2,034,835	103,194	5.1
Less: wages & ben charged to Capital Proj.	(185,000)	(40,151)	(255,126)	(169,583)	85,543	(50.4)
Total Operating Wages and benefits	2,034,820	108,092	1,676,515	1,865,252	188,737	10.1
Water Purchase HBMWD	1,175,000	95,031	1,052,303	1,077,083	24,781	2.3
Water Purchase Eureka	850,000	60,968	674,123	779,167	105,044	13.5
Water Analysis	10,000	561	9,857	9,167	(691)	(7.5)
Supplies/ Construction	120,000	14,978	86,716	110,000	23,284	21.2
Supplies/Office-Administration	4,500	-	2,841	4,125	1,284	31.1
Supplies/ Engineering	500	-	327	458	131	28.6
Supplies/ Maintenance	52,500	1,528	35,984	48,125	12,141	25.2
Temporary Labor	22,250	1,058	39,279	20,396	(18,883)	(92.6)
Repairs & Maintenance/Trucks	35,000	1,998	37,969	32,083	(5,886)	(18.3)
Equipment Rental	1,000	-	-	917	917	100.0
Building & Grounds Maintenance	4,500	372	5,844	4,125	(1,719)	(41.7)
Electrical Power	280,000	17,456	222,795	256,667	33,872	13.2
Telephone	-	-	-	-	-	-
Postage	-	218	218	-	(218)	-
Freight	500	-	48	458	411	89.6
Chemicals	12,000	2,026	11,249	11,000	(249)	(2.3)
Liability Insurance	-	-	1,213	-	(1,213)	-
Legal Services	-	-	123	-	(123)	-
Engineering	-	-	535	-	(535)	-
Other Professional Services	25,000	-	285	22,917	22,632	98.8
Transportation	43,000	5,149	35,747	39,417	3,670	9.3
Office Equip. Maintenance	600	-	565	550	(15)	(2.7)
Computer Software Maintenance	21,000	2,321	22,878	19,250	(3,628)	(18.8)
Memberships & Subscriptions	1,500	2,484	4,230	1,375	(2,855)	(207.6)
Bad Debts & Minimum Balance Writeoff	10,000	-	(3)	9,167	9,170	100.0
Conference & Continuing Ed	10,000	-	4,478	9,167	4,689	51.2
Certifications	2,500	-	3,223	2,292	(931)	(40.6)
State/County & LAFCO Fees and Charges	30,000	-	38,379	27,500	(10,879)	(39.6)

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
Water Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
Hydraulic Water Model Maintenance	2,000	-	-	1,833	1,833	100.0
Human Resources	2,500	-	3,529	2,292	(1,237)	(54.0)
Miscellaneous	1,000	-	43	917	874	95.3
General & Admin Expense Allocation	295,300	16,207	234,990	270,692	35,701	13.2
TOTAL OPERATING EXPENSES	5,046,970	330,449	4,206,284	4,626,389	420,105	9.1
LONG TERM DEBT PAYMENTS						
Safe Drinking Water Bond	-	-	-	-	-	-
2012 CIP & Refi.	-	-	-	-	-	-
Davis-Grunsky Loan	6,050	72	6,045	5,546	(500)	(9.0)
					-	-
TOTAL LONG TERM DEBT PAYMENTS	6,050	72	6,045	5,546	(500)	(9.0)
CAPITALIZED EXPENDITURES						
Vehicles/Rolling Stock/Capital Equipment	-	-	4,756	-	(4,756)	-
Building & Yard Improvements	-	-	-	-	-	-
Capital Improvements Water	2,105,700	197,890	991,775	1,930,225	938,450	48.6
Engineering & Studies	-	-	-	-	-	-
TOTAL CAPITAL EXPENDITURES	2,105,700	197,890	996,531	1,930,225	933,694	48.4
INTERFUND TRANSFERS IN	-	-	-	-	-	
BUDGET SURPLUS (DEFICIT)	(722,320)	(54,442)	465,338	(662,127)	1,127,465	170.3

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
Sewer Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
OPERATING REVENUE						
Sewer Service Charges	8,315,000	676,859	7,420,843	7,622,083	(201,240)	(2.6)
Sewer Construction Fees	21,000	-	12,544	19,250	(6,706)	(34.8)
Account Fees	35,000	3,750	46,961	32,083	14,877	46.4
Inspection Fees	700	-	464	642	(178)	(27.7)
Reimbursable Maintenance Fees	200	-	11	183	(173)	(94.1)
Miscellaneous	1,000	36	357	917	(560)	(61.1)
TOTAL OPERATING REVENUE	8,372,900	680,646	7,481,180	7,675,158	(193,979)	(2.5)
NON-OPERATING REVENUE						
Sewer Capital Connection Fees	95,000	2,493	66,062	87,083	(21,021)	(24.1)
Interest/General	40,000	17,001	181,519	36,667	144,852	395.1
Discounts Earned	750	-	280	688	(408)	(59.3)
Sales:Fixed Assets/Scrap Metal	1,000	27	6,081	917	5,164	563.4
Bad Debt Recovery	1,000	-	387	917	(530)	(57.8)
Other Non-Operating Revenue	-	-	-	-	-	-
TOTAL NON-OPERATING REVENUE	137,750	19,521	254,329	126,271	128,058	101.4
TOTAL DISTRICT REVENUE	8,510,650	700,167	7,735,508	7,801,429	(65,921)	(0.8)
OPERATING EXPENSES						
Wages Direct	565,000	36,627	455,676	517,917	62,240	12.0
Wages & Benefits: Allocated	742,820	80,143	622,655	680,918	58,264	8.6
Benefits: PERS	70,000	4,122	55,273	64,167	8,894	13.9
Group Ins	240,000	12,906	179,443	220,000	40,557	18.4
Workers Comp Ins	9,000	2,000	6,243	8,250	2,007	24.3
FICA/Medicare	41,000	2,799	34,808	37,583	2,775	7.4
Misc Benefits	-	-	-	-	-	-
					-	-
Total Wages and Benefits	1,667,820	138,597	1,354,098	1,528,835	174,737	11.4
Less: wages & ben charged to Capital Proj.	(65,000)	(803)	(68,246)	(59,583)	8,663	(14.5)
Total Operating Wages and benefits	1,602,820	137,794	1,285,852	1,469,252	183,400	12.5
Sewage Treatment: Operating & Maint.	1,900,000	168,480	1,853,280	1,741,667	(111,613)	(6.4)
Sewer Analysis	-	-	-	-	-	-
Supplies/ Construction	40,000	1,366	28,172	36,667	8,495	23.2
Supplies/ Office-Administration	4,500	-	2,143	4,125	1,982	48.0
Supplies/ Engineering	500	-	247	458	211	46.1
Supplies/ Maintenance	52,500	19,572	40,094	48,125	8,031	16.7
Temporary Labor	22,250	798	29,631	20,396	(9,235)	(45.3)
Repairs & Maintenance/Trucks	28,000	1,508	32,147	25,667	(6,480)	(25.2)
Equipment Rental	1,000	-	-	917	917	100.0
Building & Grounds Maintenance	2,500	281	4,409	2,292	(2,117)	(92.4)
Electrical Power	110,000	6,566	87,830	100,833	13,004	12.9
Telephone	-	-	-	-	-	-
Postage	-	164	164	-	(164)	-
Freight	250	494	809	229	(579)	(252.8)
Liability Insurance	-	-	915	-	(915)	-
Legal	-	-	93	-	(93)	-
Engineering	-	-	404	-	(404)	-
Other Professional Services	28,000	1,400	3,375	25,667	22,292	86.9
Transportation	32,000	3,884	26,967	29,333	2,366	8.1
Office Equip. Maintenance	200	-	426	183	(243)	(132.5)

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
Sewer Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
Computer Software Maintenance	15,000	194	18,352	13,750	(4,602)	(33.5)
Memberships & Subscriptions	1,500	-	1,556	1,375	(181)	(13.2)
Bad Debts & Minimum Balance Writeoff	22,000	-	(2)	20,167	20,169	100.0
Conference & Continuing Ed	10,000	-	589	9,167	8,578	93.6
Certifications	2,500	-	50	2,292	2,242	97.8
State/County & LAFCO Fees and Charges	7,500	-	2,722	6,875	4,153	60.4
Human Resources	2,500	-	2,662	2,292	(370)	(16.2)
Miscellaneous	1,500	-	32	1,375	1,343	97.7
General & Admin Expense Allocation	295,300	16,207	234,990	270,692	35,701	13.2
TOTAL OPERATING EXPENSES	4,182,320	358,708	3,657,909	3,833,793	175,885	4.6
LONG TERM DEBT PAYMENTS						
2014 Wastewater Revenue Bonds	486,575	-	486,575	446,027	(40,548)	(9.1)
2012 CIP & Refi.	177,600	-	177,600	162,800	(14,800)	(9.1)
VacCon Truck Loan	117,441	-	117,441	107,654	(9,787)	(9.1)
Debt Service: Allocated	-			-	-	-
					-	-
TOTAL LONG TERM DEBT PAYMENTS	781,616	-	781,616	716,481	(65,135)	(9.1)
CAPITALIZED EXPENDITURES						
Vehicles/Rolling Stock/Capital Equipment	17,500	-	15,145	16,042	897	5.6
Building, Yard& Paving Improvements	5,000	-	-	4,583	4,583	100.0
Capital Improvements Sewer	2,096,500	27,580	756,305	1,921,792	1,165,487	60.6
Engineering & Studies	-	-	-	-	-	-
TOTAL CAPITAL EXPENDITURES	2,119,000	27,580	771,450	1,942,417	1,170,967	60.3
OTHER						
City of Eureka Projects:						
Treatment Plant	698,000	-	-	639,833	639,833	100.0
Martin Slough	-	-	-	-	-	-
TOTAL OTHER	698,000	-	-	639,833	639,833	100.0
BUDGET SURPLUS (DEFICIT)	729,714	313,879	2,524,534	668,904	1,855,629	(277.4)

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
General Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
OPERATING REVENUE						
Interest (will be allocated to w/s @ y/e)	-	13,647	20,448	-	20,448	-
Miscellaneous	-	-	384	-	384	-
TOTAL OPERATING REVENUE	-	13,647	20,832	-	20,832	-
NON-OPERATING REVENUE						
Property Taxes	450,000	-	-	412,500	(412,500)	(100.0)
Insurance Rebate	-	-	-	-	-	-
Miscellanious Income	-	-	-	-	-	-
TOTAL NON-OPERATING REVENUE	450,000	-	-	412,500	(412,500)	(100.0)
TOTAL DISTRICT REVENUE	450,000	13,647	20,832	412,500	(391,668)	(94.9)
OPERATING EXPENSES						
Wages Direct	480,000	88,274	374,783	440,000	65,217	14.8
Benefits: PERS	350,000	7,146	361,253	320,833	(40,420)	(12.6)
State Unemploy Ins	-	-	-	-	-	-
Group Ins	665,000	62,210	521,157	609,583	88,426	14.5
Workers Comp Ins	5,000	1,434	4,274	4,583	309	6.7
FICA/Medicare	35,000	6,843	29,756	32,083	2,328	7.3
Misc Benefits	640	100	275	587	311	53.1
Total Wages and Benefits	1,535,640	166,008	1,291,498	1,407,670	116,172	8.3
Less: wages & ben charged to Capital Proj.	(50,000)	(5,723)	(46,188)	(45,833)	355	(0.8)
Less: Allocated to Water and Sewer Funds	(1,485,640)	(160,285)	(1,245,309)	(1,361,837)	(116,527)	8.6
Total Unallocated Wages and Benefits	-	-	-	-	-	-
Supplies/ Construction	-	-	-	-	-	-
Supplies/ Administration	6,000	1,652	5,437	5,500	63	1.2
Supplies/ Engineering	500	-	19	458	439	95.9
Supplies/ Maintenance	5,000	-	-	4,583	4,583	100.0
Invoicing	60,000	5,615	62,012	55,000	(7,012)	(12.7)
Web Payment Portal	-	-	-	-	-	
Temporary Labor	-	3,224	21,658	-	(21,658)	-
Repairs & Maintenance/Trucks	-	-	-	-	-	-
Equipment Rental	-	-	-	-	-	-
Building & Grounds Maintenance	23,000	1,450	24,856	21,083	(3,773)	(17.9)
Electrical Power	110,000	5,665	73,756	100,833	27,077	26.9
Street Lights	105,000	6,444	70,693	96,250	25,557	26.6
Telephone	16,000	1,329	19,614	14,667	(4,947)	(33.7)
Postage	850	-	2,501	779	(1,721)	(220.9)
Freight	250	-	-	229	229	100.0
Liability Insurance	100,500	-	131,597	92,125	(39,472)	(42.8)
Legal Services	70,000	724	7,364	64,167	56,803	88.5
Accounting	15,000	-	18,658	13,750	(4,908)	(35.7)
Engineering	1,000	-	-	917	917	100.0
Other Professional Services	40,000	5,000	12,438	36,667	24,228	66.1
Bank Service Charges	15,000	1,363	19,615	13,750	(5,865)	(42.7)
Transportation	-	-	-	-	-	-
Office Equip. Maintenance	3,500	201	3,814	3,208	(606)	(18.9)
Computer Software Maintenance	3,500	164	6,131	3,208	(2,923)	(91.1)
Memberships & Subscriptions	28,000	-	20,695	25,667	4,972	19.4
Bad Debts & Minimum Balance Writeoff	-	-	-	-	-	-
Conference & Continuing Ed	8,000	-	-	7,333	7,333	100.0

HUMBOLDT COMMUNITY SERVICES DISTRICT
BUDGETARY STATEMENT OF REVENUES AND EXPENSES
General Fund

May 2025

	Budgeted 2024-25	Current Month-to-Date	Actual Year-to-Date	Budgeted Year-to-Date	Y.T.D. Variance Actual to Budget	% Variance
Certifications	500	-	1,920	458	(1,462)	(318.9)
State/County & LAFCO Fees and Charges	20,000	768	768	18,333	17,565	95.8
Elections Expense	20,000	-	16,881	18,333	1,453	7.9
Human Resources	20,500	4,055	8,700	18,792	10,092	53.7
Miscellaneous	7,500	54	248	6,875	6,627	96.4
Director's Fees	16,000	1,150	11,300	14,667	3,367	23.0
General & Admin Expense Allocation	(590,600)	(32,414)	(469,981)	(541,383)	(71,402)	13.2
TOTAL OPERATING EXPENSES	105,000	6,444	70,693	96,250	25,557	26.6
LONG TERM DEBT PAYMENTS						
2014 PGE Energy Efficiency Loan	-	-	-	-	-	-
2012 CIP & Refi	-	-	-	-	-	-
New Financing	-	-	-	-	-	-
Less: Allocated to Water & Sewer Funds	-	-	-	-	-	-
TOTAL LONG TERM DEBT PAYMENTS	-	-	-	-	-	-
CAPITALIZED EXPENDITURES						
Vehicles/Rolling Stock/Capital Equipment	112,000	3,413	26,384	102,667	76,283	74.3
Building, Yard & Paving Improvements	390,000	4,121	90,444	357,500	267,056	74.7
Engineering & Studies	-	-	-	-	-	-
District Design Standards	-	-	-	-	-	-
TOTAL CAPITAL EXPENDITURES	502,000	7,534	116,828	460,167	343,339	
INTERFUND TRANSFER OUT		-	-	-		
BUDGET SURPLUS (DEFICIT)	(157,000)	(331)	(166,689)	(143,917)	(22,772)	15.8

Humboldt Community Services District
Notes
May 2025

Note 1 - Non Operating and Miscellaneous Revenue

Non-operating, Construction/Capacity Charges and Miscellaneous income occurs occasionally throughout the year, or at the very end of the fiscal year.

Note 2 - Interest Income

Increase in Interest Income due to improved performance with funds held in CA CLASS JPA investment pool.

Note 3 - Invoicing

Invoicing costs have increased primarily due to increases in postage costs which were not captured in the originally budgeted amount. Total amount for the Fiscal year is projected to be approximatley $7,000 above budgeted amount. Overage is not expected to have significant impact on District finances.

Note 4 - Temporary Labor

Increased use of temporary labor during summer months when District has increased need for labor. District staff opening has also resulted in additional use of temp labor. Temp Labor costs are expected to decline in future months. Overage in temporary labor is offset by reduction in direct wage expenses.

Note 5 - Repairs and Maintenance - Trucks

Annual maintenance on multiple District vehicles in January (expected) in addition to necesarry repairs on multiple vehicles(unexpected). May result in overage vs budget of $10,000-$20,000 for the year. Overage is not expected to have signfiicant impact on District finances.

Note 6 - Buildings and Grounds Maintenance

In addition to normal expected expenditures, purchase of new ladders for Shop was made for $2,181 in August. Additional expenses over budget in September due to disposal of dry pit debris and increase in Garbage service costs. Total Building and grounds maintenance expenditures for the year are projected to be approximatley $10,000 over budegted amount. Overage is not projected to have significant impact on District finances.

Note 7 - Telephone

The District has installed a new phone system, which will result in Phone expenses for the year being approximately $5,000 over budgeted amount. Overage is not anticipated to have signfiicant impact on District finances.

Note 8 - Postage

District purcahsed $2,500 postage refill for District Postage meter. Such refills are infrequent, last ocurring in FY 2023 and was not captured in budgeted amount. Overage compared to budegt is not expected to have signficiant impact.

Note 9 - Liability Insurance

Multiple factors have resulted in an increase in the District's Liability and Property Insurance expenses. The Primary factor is a Genral increase in rates enacted by ACWA/JPIA affecting all entities covered by ACWA/JPIA resulting in a 15% increase in base rates. Additionally, prior year's premiums were lowered by the use of a "rate stabilization fund" which helped to smooth year-to-year premium changes, however this rate stabilization fund has been exhausted and is now discontinued. Lastly, increases in the District's property from new purchases, capital improvements, and Payroll also contributed to cost increase.

Note 10 - Accounting

Additional expenses due to finalizing prior year's audits. Cost for year are expected to be above budgeted amount, however overage is not predicted to have significant impact on District finances.

Note 11 - Bank Service Charges

Large balanace previoulsy in Bank account resulted in negation of service charges. New balance since transfer of funds to CA CLASS has resulted in Bank service charges no longer being negated, resulting in additional $550/month in bank service charges. Charges are more than offset by additional gains in interest earned. Implementation of new online payment system has also resulted in additional charges of $250/month, but has also resulted in signficiantly improved system for customer online account access.

Note 12 - Office Equipment Maintenance

Cost over budget due to covnersion old District server into Backup Domain controller to ensure District computer system robustness

Note 13 - Computer Software Maintenance

Maintenance/Licencing fees for computer sofwtare is paid in one annual charge in July. Total expense for year is expected to be in line with annual budgeted amount.

Note 14 - Debt Service

Loan Payments are made throughout the year. The total expenditres by the end of the year will match budget amounts.

Note 15 - Engineering

Engineering Expense - a/c 6810 - Operating Expense	May 2025	YTD
Water Fund		
On Call Engineering Bid Request Advert	-	939
Total posted to 6810	**-**	**939**
Engineering & Studies - a/c 9040 - Capital Improvement Projects		
Non Engineering Costs Posted to 9040		
None	-	-
Grand Total posted to 9040	**-**	**-**

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ENGINEERING MEMORANDUM

To: Board of Directors

From: Kush Rawal, Assistant Engineer

Date: June 20, 2025

Subject: Assistant Engineer Progress Report for June 24, 2025 Board Meeting

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Water Storage Tank Dive Inspection and Evaluation

Between June 9 and June 12, 2025, Harper & Associates Engineering, Inc. conducted underwater dive inspections and structural condition assessments of six District water storage tanks. Harper & Associates is a specialized civil engineering consulting firm and the only engineering provider in California qualified to perform potable water dive inspections in combination with structural and corrosion engineering evaluations.

The inspection effort focused on the following six tanks:

- Walnut Drive Tank (0.5 MG)
- Dana Lane Tank (0.375 MG)
- Blue Spruce Tank (0.5 MG)
- Lentell Tank (0.15 MG)
- Cummings Tank (0.12 MG)
- Pigeon Point Tank (0.17 MG)

The purpose of these inspections was to provide the District with a comprehensive assessment of the condition of the remaining tanks in need of rehabilitation. These evaluations will inform future planning and prioritization for the District's Water Storage Tank Rehabilitation Program.

Inspections were performed by certified potable-water divers and included visual assessments of submerged surfaces, appurtenances, foundations, and coating systems. In accordance with AWWA C652-92 standards, strict sanitary measures were followed, including the use of fully encapsulated diver suits and equipment disinfection protocols. Each tank was also inspected in the vapor zone using inflatable rafts for evaluation of the roof, structural elements, and upper wall conditions.

The final deliverables will include photographic surveys, inspection videos, and detailed engineering reports with conclusions and recommendations regarding coating condition, corrosion risk, structural integrity, and suggested maintenance or rehabilitation needs. A follow-up meeting between District staff and Harper & Associates will be scheduled to review findings and integrate the recommendations into the District's long-term capital improvement planning.

Figure 1. Harper and Associates Employee viewing live footage provided by tank diver and recording notes.

Figure 2. Harper and Associates Employee serving as confined space attendant and emergency resuce personnel for tank diver.

Humboldt Community Services District

Dedicated to providing high quality, cost effective water and sewer service for our customers

MEMORANDUM

TO: Board of Directors

FROM: Brian McNeill, Utility Services Planner

DATE: June 20, 2025

SUBJECT: Utility Services Planner Report for June 24, 2025 Board Meeting

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The State Water Resources Control Board's Division of Drinking Water, issues water quality monitoring schedules that identify upcoming required testing of drinking water for water systems in California. In June, the District is required to sample from both the South Bay Well, and Spruce Point Well for a total of 56 different constituents. Included in the 56 constituents, is sampling for Chloride, Iron, Manganese, Turbidity, Nitrite, and regulated volatile organic compounds (VOCs). The District is also required to collect samples from our distribution system for Disinfection by-products (DBPs), which are organic and inorganic compounds resulting from chemical reactions between organic and inorganic substances such as contaminants and chemical treatment disinfection agents used during the water disinfection process.

Staff continues to replace the District's old meter stock with newer more accurate automated water meters as part of the Automated Meter Reading CIP program. In the first two weeks of June, 113 new meters have already been installed.

Humboldt Bay Municipal Water District (HMMWD) has temporarily increased the chlorine residual in the water the District purchases, as a proactive measure, while they perform a seismic retrofit of its domestic water storage tanks. In areas within the District where HBMWD's water is delivered to District customers, staff had observed a doubling of chlorine residual levels in the drinking water compared to the typical chlorine residuals found in the distribution system. Sampling from the distribution system typically reflects a chlorine residual between 0.2 and 0.5 mg/l. With HBMWD's temporary increase, chlorine residuals are showing between 0.4 and 1.0 mg/l throughout the distribution system. The District has not received any calls from customers regarding the increased chlorine residual levels.

All weekly bacteriological water quality samples were collected throughout the District and all monthly required reporting to the various State agencies has been completed and submitted.

Mailing: Post Office Box 158 • Cutten, CA 95534 • tel (707) 443-4558 • fax (707) 443-1490
Physical Address: 5055 Walnut Drive, Eureka, CA 95503

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Humboldt Community Services District

Dedicated to providing high quality, cost effective water and sewer service for our customers

AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **F.1**

TITLE: Consideration of Fiscal Year 2025/26 Salary Adjustment for HCSD's Non-represented (Management) Employees

PRESENTED BY: Terrence Williams, General Manager

Recommendation:

Discussion followed by a motion to approve Fiscal Year 2025/26 salary adjustment for HCSD's non-represented (management) employees.

Summary:

The District's Employee Association represents all permanent hourly employees, including staff from the Customer Service, Construction, Maintenance, and Engineering departments. In addition to represented employees, the District employs salaried, exempt management staff who are not part of the Employee Association. These non-represented employees include the Finance Manager (Michael Montag), Assistant Engineer (Kush Rawal), and General Manager (Terrence Williams).

During the June 10, 2025 meeting, the Board approved a 3.0% Cost-of-Living Adjustment (COLA) for all represented hourly employees as part of the Fiscal Year 2025/26 budget.

At this time, management staff are requesting a 3.0% COLA, consistent with the adjustment provided to the District's represented employees.

Fiscal Impact:

$11,311.20

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Humboldt Community Services District

Dedicated to providing high quality, cost effective water and sewer service to our customers

MEMORANDUM

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **F.2**

TITLE: Consideration of Revisions to HCSD's Cross-Connection Control Program

PRESENTED BY: Brian McNeill, Utility Services Planner

Recommendation:

Review and adopt the updated District Cross-Connection Control Plan

Detail:

The California State Water Resources Control Board overhauled the regulations covering Cross-Connection Control for water Districts in California by issuing the Cross-Connection Control Policy Handbook (CCCPH) that went into effect July 1, 2024. Water Districts were given one year from the adoption of the CCCPH to comply with the changes and update their Cross-Connection Control Plan. The new Cross-Connection Control Plan included in the Board packet, captures all the existing and new requirements.

Fiscal Impact
None

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Humboldt Community Services District

Cross-Connection Control and Prevention of Backflow Program

Cross-Connection Control Standards

Humboldt Community Services District (District) shall from time to time adopt cross-connection control standards that establish the District's requirements for design, construction, installation, and maintenance of backflow prevention assemblies. The purpose of these standards is to protect the potable water supply of the Humboldt Community Services District from unapproved sources entering the District's water distribution system through cross-connections. Any person receiving or using water from the District's water distribution system shall comply with all provisions of the District's current cross-connection control standards, and the violation of any provision thereof shall constitute an infraction. In the event a water customer is found to be in violation of the cross-connection control standards by the District, the customer's water service may be discontinued. The foregoing provisions shall be cumulative and in addition to any other remedy provided under any applicable law or regulation.

Cross-Connection Control (CCC) Program Plan

Public Water System (PWS) Information

Our PWS has ownership of all buildings served by the PWS. YES ☐ NO ☒

If "no", attach a copy of the operating rule(s), ordinance(s), bylaws, resolution(s), or other document(s) which authorize the PWS to enforce the CCC program requirements. **See Appendix A**

PWS Name:	Humboldt Community Services District
PWS Number:	CA 1210009
Facility Address:	5055 Walnut Drive, Eureka CA 95503
Number of Single-Family Service Connections:	7,187
Number of Multifamily Residential Service Connections:	475
Number of Commercial Connections:	290
Number of Industrial Service Connections:	0
Number of Agricultural Service Connections:	0
Number of Landscape Irrigation Connections:	38
Total Number of Service Connections:	7,990

PWS Background CCC Information

Number of Fire Protection System Service Connections (Residential)	3
Number of Fire Protection System Service Connections (Non-Residential)	137
Number of Air Gaps used for backflow protection at the service connection	0
Number of Service Connections where internal protection is used in lieu of premises containment	0
Number of Recycled Water (RW) use sites	0
Number of Swivel-ells used for backflow protection at the service connection (applies to Recycled Water use sites)	0
Number of Sites requiring a water user supervisor (CCCPH Section 3.2.2 (f))- applies to any sites using recycled water, complex piping systems, or a user supervisor deemed necessary by the PWS	0

Backflow Testing

Our PWS has backflow prevention assemblies installed? YES ☒ NO ☐

Required backflow prevention assembly maintenance, repair, or replacement will happen within **30** days after identification.	
All backflow prevention assemblies are tested at least **one** time each year. Testing procedures shall follow University of Southern California (USC) Manual of Cross-Connection Control 10th Edition Backflow Test Procedures	
Names and certification numbers of the certified testers used at the PWS.	**Maples Plumbing** (David Webb)- AWWA #19654 exp. 5/31/27 **Mario Palmero-** NCBPA #687 exp. 7/12/27 **Gary Ciraulo**- NCBPA #607 exp. 1/27/26 **Brian McNeill**- AWWA #10383 exp. 6/30/28 **Christopher Armstrong**-AWWA #20147 exp. 3/31/28
I certify that our testers' field test kit is accurate and recently verified.	YES ☒ NO ☐

I certify that testers provide the PWS with copies of the backflow prevention assembly test results.	YES ☒ NO ☐
The PWS has non-testable backflow preventers used for internal protection (for example single check valves)?	YES ☒ NO ☐ If yes, complete **Appendix B**-inventory of non-testable backflow preventers.
If "yes", were the non-testable backflow preventers installed and maintained in accordance with the CA Plumbing Code?	YES ☒ NO ☐

Certification

I certify that the information submitted in this CCC Plan is accurate and that we will comply with the Cross-Connection Control Policy Handbook (effective date July 1, 2024). Our PWS will ensure its Cross-Connection Control Plan is, at all times, representative of the current operation of its Cross-Connection Control program.

Attached (**Appendix K**) are copies of our backflow prevention assembly inventories.

Name: Brian McNeill **Role:** Cross-Connection Control Specialist

Signature: **Date:**

DDW Review:

The water system has demonstrated compliance with the CCC Plan requirements of the CCCPH.

Name: Scott Gilbreath **Title:** Water Resource Control Engineer

Signature: **Date:**

Contents

Appendix

Appendix A: HCSD Rules and Ordinances

Appendix B: Single Check Fire Protection Service Connections

Appendix C: Detail Drawings for Backflow Prevention Assembly Installation

Appendix D: Air Gap Specifications

Appendix E: Backflow Prevention Assembly Diagrams

Appendix F: Swivel-Ell

Appendix G: Incident Response Reporting Form

Appendix H: Laws regarding CCCPH authority

Appendix I: High Hazard Cross-Connection Premises

Appendix J: Hazard Assessment Form

Appendix K: Backflow Prevention Assembly Inventory

1 General Provisions

Objective

In order to protect the public water system, Humboldt Community Services District, Public Water System CA 1210009, located at 5055 Walnut Drive, Eureka CA 95503, is hereinafter referred to as "District" or "PWS", has the responsibility to protect the public water supply through implementation and enforcement of a cross-connection control (CCC) program.

The CCC requirements are contained in the Cross-Connection Control Policy Handbook (CCCPH), which are incorporated into the State of California's Drinking Water Regulations and became effective July 1, 2024. The CCCPH and its standards apply to all California PWSs, as defined in California's Health and Safety Code (CHSC, section 116275 (h)). Compliance with this CCCPH is mandatory for all California PWSs.

The Humboldt Community Services District Board of Directors, has previously adopted Ordinance No. 2021-01 providing the legal authority for the District's *Cross-Connection Control and Prevention of Backflow Program* (Program). **Appendix A**.

The objectives of the Cross-Connection Control Program are to:

- Protect the PWS at the service connection against any actual or potential cross-connection between the PWS and any source or system containing any substance that is not, or cannot be, approved as safe, wholesome and potable for human consumption.
- Outline District and Customer responsibilities for protection of the public water system.
- Outline criteria determining when backflow protection is required.
- Specify requirements for backflow prevention assemblies to protect the water system.
- Comply with Federal, State, and local laws and policies and to allow the District to meet applicable regulatory requirements and standards.

All Customers of the District are subject to the conditions of this Program, as set forth herein.

1.2 Administration

Except as otherwise provided, District staff, under the direction of the cross-connection control specialist, shall administer, implement, and enforce the provisions of this Program. Any powers granted to or duties imposed by the District General Manager may be delegated to a duly authorized employee.

1.3 Policy Development Background and Legal Authorities

Through the adoption of the CCCPH, the State Water Board is exercising its authority, under California's Safe Drinking Water Act (SDWA), to establish enforceable standards applicable to California's PWSs. Failure to comply with the CCCPH may result in the issuance of compliance, enforcement, or other corrective actions against a PWS. **See Appendix H** for more information.

1.3.1 California Safe Drinking Water Act

On October 6, 2017, Assembly Bill 1671 (AB 1671) was approved and filed with the Secretary of State. AB 1671 amended California's SDWA through the establishment of CHSC sections 116407 and 116555.5. AB 1671 also amended section 116810 of the CHSC.

On October 2, 2019, Assembly Bill 1180 (AB 1180) was approved and filed with the Secretary of State. AB 1180 amended Section 116407 of the CHSC and added section 13521.2 to the Water Code. AB 1180 requires that the CCCPH include provisions for the use of a swivel or changeover device (swivel-ell).

AB 1671 and 1180 established the following:

- The State Water Board must adopt standards for backflow protection and cross-connection control by January 1, 2020.
- The State Water Board may establish standards for backflow protection and cross-connection control through the adoption of the CCCPH, with the CCCPH not being subject to the requirements of the CA Administrative Procedure Act.
- If standards for backflow protection and cross-connection control are established via the CCCPH, the State Water Board must:
    - Consult with state and local agencies and persons, identified by the State Water Board, as having expertise on the subject of backflow protection and cross-connection control.
    - Hold at least two public hearings before adoption of the CCCPH.
    - Post the CCCPH on the State Water Board website.
- Upon the effective date of the CCCPH, the previous cross-connection control standards become inoperative, and are repealed 90 days later, unless the State Water Board determines not to repeal a specific existing regulation.
- A PWS must implement a cross-connection control program that complies with the standards adopted by the State Water Board.
- Use of a swivel-ell must be consistent with any notification and backflow protection provisions contained in the CCCPH.

Pursuant to sections 116407 and 116555.5 of the CHSC, the State Water Board chose to adopt standards for backflow protection and cross-connection control through the adoption of the CCCPH, which became effective July 1, 2024.

Aside from the mandates of AB 1671 related to the State Water Board's need and authority to develop and adopt an enforceable CCCPH, there are long-standing statutory mandates in California's SDWA concerning backflow protection and cross-connection control, some of which are summarized below.

- The State Water Board is required to adopt regulations for the control of cross-connections that it determines to be necessary for ensuring PWSs "distribute a reliable and adequate supply of pure, wholesome, potable, and healthy water". (CHSC section 116375, subd. (c).)
- Any person who owns a PWS is required to ensure that the distribution system will not be subject to backflow under normal operating conditions. (CHSC section 116555, subd. (a)(2).)

Prior to AB 1671 and the adoption of the CCCPH, California's regulations pertaining to cross-connection control were set forth in regulations in CCR Title 17, which were adopted in 1987 with minor revisions in 2000. Although still protective to public health, the CCR Title 17 cross-connection regulations required updating as both drinking water and cross-connection control industries had evolved. The CCCPH updates those regulations, which as previously noted are no longer operative following the adoption of the CCCPH.

1.4 Definitions

"Air-Gap Separation" shall mean a physical vertical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressurized receiving vessel. The air-gap shall be at least double the diameter of the supply pipe measured vertically above the top rim of the vessel, in no case less than one inch. **See Appendix D**

"Approved Backflow Prevention Assembly or ABPA" shall mean any assembly that has passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the California State Water Resource Control Board.

"Approved Water Supply" shall mean a water source that has been approved by the State Water Board for domestic use in a public water system and designated as such in a domestic water supply permit issues pursuant to section 116525 of the California Health and Safety Code (CHSC).

"Atmospheric Vacuum Breaker (AVB)" shall mean an air inlet valve, a check seat and an air inlet port(s). May only be used to prevent back-siphonage. Must be installed at least six inches above all downstream piping and outlets. Additionally, may not be subject to continuous pressure. It may only be in use for twelve out of any twenty-four-hour period and may have no shutoff valves or control valves downstream. AVB is a non-testable device.

"Auxiliary Water Supply" means any water supply on, or available to the premises other than the District's potable water supply. Auxiliary water supply may include water from another purveyor's potable water system, water held in storage tanks, or any natural source(s), e.g., a well, creek, river, harbor, recycled water, pipeline; grey water; or industrial fluids. These waters may be contaminated, polluted, and objectionable or constitute an unacceptable water source over which the PWS does not have sanitary control.

"AWWA standard" shall mean an official standard developed and approved by the American Water Works Association (AWWA).

"Backflow" shall mean an undesired or unintended reversal of flow of water and/or other liquids, gases, or other substances into a public water system's distribution system or approved water supply.

"Backflow prevention assembly" or "**BPA**" means a mechanical assembly designed and constructed to prevent backflow, as designed, can be field tested, inspected and evaluated.

"Backflow prevention assembly tester" means a person who is certified as a backflow prevention assembly tester with a current CA-NV AWWA certification, or a different State approved organization with equivalent certification requirements. By July 1, 2027, an American National Standards Institute (ANSI)-accredited certifying organization, accredited in accordance with subsection (b) of the CCCPH and ISO/IEC 17024, will be considered to be a State Water Board-recognized certifying organization. Beginning three years after the adopted date (July 1, 2024) of the CCCPH, only those testers with a valid certification from an ANSI-accredited certifying organization shall satisfy subsection (a) and certifications obtained by organizations in accordance with subsection (c) will be invalid per the CCCPH.

"Backpressure" means the form of backflow due to a reduction in system pressure in the downstream piping system (caused by pump, elevation of piping, steam and/or air pressure) is above the supply pressure at the point of consideration resulting in a reversal of the normal flow.

"Back-Siphonage" means the form of backflow due to a reduction in system pressure that causes a negative or sub atmospheric pressure to exist at a site in the District's potable water system.

"Contaminant" shall mean a degradation of the quality of the potable water by any foreign substance which creates a hazard to the public health, or which may impair the usefulness or quality of the water.

"Controlled Cross-Connection" means a connection between the District's potable water system and a non-potable water system with an approved backflow prevention assembly (BPA) properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

"Cross-Connection" shall mean any actual or potential connection or structural arrangement between a potable water system, including a piping system connected to the public water system and located on the premises of a water user or available to the water user, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

"Cross-Connection Control Specialist" shall be a Cross-Connection Control Program Specialist with a current CA-NV AWWA certification, or a different State approved organization with equivalent certification requirements. By July 1, 2027, an American National Standards Institute (ANSI)-accredited certifying organization, accredited in accordance with subsection (b) of the CCCPH and ISO/IEC 17024, will be considered to be a State Water Board-recognized certifying organization. Beginning three years after the effective date (July 1, 2024) of the CCCPH, only those specialists with a valid certification from an ANSI-accredited certifying organization shall satisfy subsection (a) and certifications obtained by organizations in accordance with subsection (c) will be invalid per the CCCPH.

"Degree of Hazard" shall be derived from the evaluation of conditions within a system which can be classified as either a pollutant (non-health) or a contaminant (health) hazard.

"Destructed Well" shall mean any well in which all pumping components including but not limited to pump, piping, and power supply (if equipped) shall be removed from the well casing. Additionally, documentation from the County of Humboldt Environmental Health Department stating that the well was officially destroyed per their standards.

"Distribution system" means all physical parts of the water system, including, but not limited to: pipes, valves, pumping stations, storage tanks, and user service lines, that are located between the water treatment plant, or the source if there is no treatment, and the consumer's service connection.

"Double Check Detector Backflow Prevention Assembly (DCDA)" means a specifically designed assembly composed of an approved double check valve assembly with a bypass containing a water meter and an approved double check valve assembly. The water meter shall register accurately for rates of flow up to 2 gpm (gallons per minute) and shall show a registration for all rates of flow. DCDA assemblies shall only be used to protect against a non-health hazard. The DCDA is primarily used on fire sprinkler systems. **See Diagram, Appendix E**

"Double Check Valve Assembly" or "**(DC)"** shall mean an assembly consisting of two independently-acting internally loaded check valves, with tightly closing shut-off valves located at each end of the assembly (upstream and downstream of the two check valves) and fitted with test cocks that enable accurate field testing of the assembly. This type of assembly may only be used to isolate low hazard cross-connections. **See Diagram, Appendix E**

"Hazard Assessment" means an evaluation of a user premises designed to evaluate the types and degrees of hazard at a user's premises.

"Hazardous Substances" means any hazardous waste or hazardous substance as defined in any Federal, State or local ordinance; and the Hazardous substances shall also include asbestos, or asbestos-containing materials, radon gas, and petroleum or petroleum fractions, whether or not defined as hazardous substance in any such statue, ordinance, rule or regulation.

"High Hazard cross-connection" means a cross-connection that poses a threat to the potability or safety of the public water supply. Materials entering the public water supply through a high hazard cross-connection are contaminates or health hazards.

"Low Hazard cross-connection" means a cross-connection that has been found to not pose a threat to the potability or safety of the public water supply but may adversely affect the aesthetic quality of the potable water supply. Materials entering the public water supply through a low hazard cross-connection are pollutants or non-health hazards.

"Manual of Cross-Connection Control" shall refer to the most current edition of the Manual of Cross-Connection Control as published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research.

"Objectionable Substance" means a substance introduced into the PWS that may not necessarily pose a threat to public health, but may adversely affect the taste, appearance or other aesthetic qualities of the potable water supply.

"Point of Service Connection" shall refer to the point of connection of a user's piping to the PWS.

"Pollution" shall mean an impairment of the quality of the water to a degree which does not create a hazard to the public health, but which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.

"Premise" shall mean any and all areas on a Customer's property which are served or have the potential to be served by the public water system.

"Premises containment" means protection of a public water system's distribution system from backflow from a user's premises through the installation of one or more air gaps or BPA's, installed as close as practical to the user's water supply from the public water system's distribution system.

"Pressure vacuum breaker backsiphonage prevention assembly or **(PVB)"** means an assembly with an independently-acting internally-loaded check valve and an independently-acting loaded air inlet valve located on the discharge side of the check valve; with test cocks and tightly closing shutoff valves located at each end of the assembly that enable accurate field testing of the assembly. This type of assembly may only be used for protection from backsiphonage and is not to be used to protect from backpressure. **See Diagram, Appendix E**

"Public water system" or "PWS" has the same meaning as defined in section 116275(h) of the California Health and Safety Code (CHSC).

"Recycled Water" is wastewater which as a result of treatment is suitable for uses other than potable use.

"Reduced Pressure Principle Backflow Prevention Assembly" or **(RP)"** shall mean an assembly with two independently acting internally-loaded check valves, with a hydraulically operating mechanically independent differential-pressure relief valve located between the check valves and below the upstream check valve. The assembly shall have shut-off valves located upstream and downstream of the two check-valves, and test cocks to enable accurate field testing of the assembly. **See Diagram, Appendix E**

"Reduced Pressure Principle Detector Assembly (RPDA)" shall mean a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a water meter and an approved reduced pressure principle assembly. The water meter shall register accurately for rates of flow up to 2 gpm (gallons per minute) and shall show a registration for all rates of flow. This assembly shall be used to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant). The RPDA is primarily used on fire sprinkler systems. **See Diagram, Appendix E**

"Service Connection" means the PWS pipeline and appurtenances from the District's water main to the customer's water system; in particular, the point where jurisdiction for sanitary control over the water passes from the District to the customer. If a customer meter is installed at the end of the service connection, then "service connection" shall mean the downstream end of the meter. There shall be no unprotected connections from the service line upstream of any meter or backflow prevention assembly

located at the point of delivery to the customer's water system. The term "service connection" shall also include a water service connection from a fire hydrant and all other temporary or emergency water service connections from the District's potable water system.

"Spill-resistant pressure vacuum breaker backsiphonage prevention assembly" or **"SVB"** means an assembly with an independently-acting internally-loaded check valve and an independently-acting loaded air inlet valve located on the discharge side of the check valve; with shutoff valves at each end and a test cock and bleed/vent port, to enable accurate field testing of the assembly. This type of assembly may only be used for protection from backsiphonage and is not to be used to protect from backpressure. **See diagram, Appendix E**

"State Water Board", unless otherwise specified, means the State Water Resources Control Board or the local primacy agency having been delegated the authority to enforce the requirements of the CCCPH by the State Water Resources Control Board.

"Swivel-Ell" means a reduced pressure principle backflow prevention assembly combined with a changeover piping configuration (swivel-ell connection) designed and constructed pursuant to this Chapter. **See design and construction criteria, as well as Diagrams, Appendix F.**

"Thermal Expansion" means the resulting effect when water in a closed system, such as a piping system downstream of a backflow prevention assembly heats up, typically due to a water heater. In effect, the heat causes the water volume to expand, but since the system is closed, the pressure increases. The installation of an expansion tank, may be necessary in conjunction with installing a backflow prevention assembly to prevent a dangerous buildup of pressure. All associated costs for installing an expansion tank shall be borne by the Customer.

"Unapproved Auxiliary Water Supply" shall mean any water supply on or available to the premises other than the approved water supply. An Unapproved Auxiliary Water Supply includes, but is not limited to, a well, spring, creek, pond, storage tank or any other water source that is piped or captured in any fashion that would facilitate its use as an Unapproved Auxiliary Water Supply on the premises. An Unapproved Auxiliary Water Supply does not include a decorative or natural water feature that serves solely for aesthetic and/or recreational purposes and lacks piping and/or equipment that would facilitate its use as an Unapproved Auxiliary Water Supply on the premises.

"User premises" means the property under the ownership or control of a water user and is served, or is readily capable of being served, with water via a service connection with a public water system.

"User's service connection" means either the point where a water user's piping is connected to a water system or the point in a water system where the approved water supply can be protected from backflow using an air gap or backflow prevention assembly.

"Water supplier" means a person or entity who owns or operates a public water system.

"Water user" means a person or entity who is authorized by the PWS to receive water.

"Water User Supervisor" means a person designated by a water user to oversee a water use site and responsible for the avoidance of cross-connections.

2 Responsibility

Responsibility for protection of the public water system is shared by the District and the Customer.

2.1 District Responsibility

The CCCPH states that the water supplier has primary responsibility for protecting the public water system from contamination and/or pollution by implementing a Cross-Connection Control Program.

The District fulfills its responsibility by requiring point of service connection protection at all existing service connections that have been surveyed and found to have existing actual and/or potential hazards to the public water system. The District does not recognize internal cross-connection protection programs and/or internal backflow protection assemblies in lieu of point of service connection protection as described herein.

2.2 Compliance Enforcement

If District personnel determine that a backflow prevention assembly is required, the installation of such an assembly shall be a condition of continued water service. The Customer shall be notified in writing and given no more than 45 calendar days from the date of the initial notice to comply. If a Customer fails to comply, then the District shall proceed with enforcement up to and including discontinuation of water service to the parcel being served. In the event the District determines a Customer's water service poses an immediate health risk to the public water supply, the District reserves the right to immediately discontinue water service without prior notification and must do so to comply with the CCCPH.

2.3 Customer Responsibilities

The Customer will have the prime responsibility of preventing contaminants and/or pollutants from their water systems entering the public water system.

3 Cross-Connection Control Program Coordinator

Per the CCCPH, the PWS must designate at least one individual involved in the development of and be responsible for the reporting, tracking, and other administrative duties of the CCC program. For PWS with more than 3,000 service connections the CCC program coordinator must be a CCC specialist. The CCC specialist must be a permanent or contracted employee of the PWS. The CCC specialist, or the CCC specialist's designee, must be available to be contacted within one hour.

1. The following cross-connection related tasks to be performed by or under the direction of the PWS's certified CCC specialist:
   a. Preparation of and recommendations regarding changes to the CCC program;
   b. Performance of and/or review and approval of CCC hazard assessments;
   c. Provide recommendations of the type of BPAs to be installed;
   d. Provide recommendations on schedules for retrofitting of BPAs;

e. Conduct or assist with the enforcement of CCC non-compliance;
f. Conduct inspections of BPAs for proper application and installation;
g. Conduct review of BPA inspection and test reports (may also be performed by a certified BPA tester);
h. Provide recommendations and/or granting of exceptions to mandatory premises containment (protection at the service connection);
i. Conduct or assist PWS staff in the investigation of backflow incidents and other water quality problems;
j. Completion of Backflow Incident Reports; and
k. Completion or review and approval of CCC Annual Reports and other deliverables required by the State Water Board.

2. The PWS may delegate other CCC program activities to other personnel who are not certified CCC specialists. These personnel must be noted on the following page. These activities may include:
   a. Mailing, collecting, and initial screening of hazard assessments;
   b. Mailing of BPA testing and non-compliance notices;
   c. Receiving and screening of assembly testing reports;
   d. CCC program database administration and recordkeeping;
   e. Distribution of public education and outreach material; and
   f. Assisting with tasks associated with coordination with the local entities.
3. The following table identifies the current certified specialist employed or retained on contract by the PWS to manage the PWS's CCC program and/or act as the CCC technical resource for the PWS:

Name of Designated Certified CCC Specialist	Brian McNeill
Address	5055 Walnut Drive, Eureka CA 95503
Email	bmcneill@humboldtcsd.org
Phone Number	707-443-4559
Certifying Organization and Specialist Certification Number	AWWA Cross-Connection Control Program Specialist-Certification Number: 02373 Originally Issued 10/26/2012, Expires 10/31/2026

Name of CCC Coordinator	Brian McNeill
Email	bmcneill@humboldtcsd.org
Phone Number	707-443-4559

Name of the 24-hour CCC Contact (Can be the CCC Specialist or a designee)	Brian McNeill
Title (if not the CCC Specialist)	
Email	bmcneill@humboldtcsd.org
24-hour Phone Number	707-499-0155

Any other PWS personnel (staff or contracted) involved with implementing the CCC Program:

Name	Christopher Armstrong
CCC Role/Title	BPA tester
Email	carmstrong@humboldtcsd.org
Phone Number	707-443-4559
Any CCC Certification (Tester or Specialist) Number and Certifying Organization	Tester number: 20147/AWWA

4 Cross-Connection Hazard Assessments

The PWS must survey its service area and conduct hazard assessments per CCCPH Chapter 3, Article 2 that identifies actual or potential cross-connection hazards, degree of hazard, and any backflow protection needed.

4.1 Initial Cross-Connection Hazard Assessments

In accordance with the CCCPH Section 3.2.1, the PWS must conduct an initial hazard assessment of the user premises within its service area. The hazard assessment must consider the following criteria:

a. The existence of cross-connections
b. The type and use of materials handled and present, or likely to be, on the user's premises
c. The degree of piping system complexity and accessibility
d. Access to auxiliary water supplies, pumping systems, or pressure systems
e. Distribution system conditions that increase the likelihood of backflow
f. User premises accessibility
g. Any previous backflow incidents on the user premises
h. The requirements and information provided in the CCCPH.

The procedures for conducting the initial hazard assessments are as follows:

1. For **industrial service connections**, the PWS will utilize the following:
   - No industrial service connections currently exist within PWS service area. PWS will monitor requests for any new industrial service connections and may utilize the following hazard assessment procedure(s).
     - PWS staff will review any or records on file and/or building permit applications for hazard assessment.
     - PWS staff will conduct onsite assessment or site survey for hazard identification.
     - PWS staff may review GIS, and/or customer surveys for hazard assessment.
2. For **commercial service connections**, **agriculture service connections, landscape irrigation service connections, single-family residential service connections, multi-family residential service connections,** the PWS will utilize the following:
   - PWS staff will review any or records on file and/or building permit applications for hazard assessment.
   - PWS staff will conduct onsite assessment or site survey for hazard identification.
   - PWS staff may review GIS, and/or customer surveys for hazard assessment.

Initial Cross-Connection Hazard Assessments

Proposed date for the completion of the initial hazard assessment:	July 1, 2026
Name and certification of who reviewed or conducted the hazard assessment:	Brian McNeill, Cross-Connection Control Specialist
Did you comply with all recommendations from the hazard assessment?	Yes
Are all known hazards protected with appropriate backflow prevention within your service area?	Yes
Date of the next planned hazard assessment:	Currently, ongoing.
Did the hazard assessment find any auxiliary water supplies? If yes, what type?	Yes. Private wells, storage tanks, swimming pools, ponds and creeks (used for irrigation).

4.2 Cross-Connection Hazard Survey Schedule for Subsequent Hazard Re-Assessments

In accordance with CCCPH Section 3.2.1 (e), the PWS is required to perform a hazard re-assessment if one of the following criteria applies:

a. If a user premises changes account holder (excluding single family residences)
b. If a user premises is newly or re-connected to the PWS
c. If evidence exists of changes in the activities or materials on a user's premises

d. If backflow from a user's premises occurs
e. Periodically, at least one new assessment every 10 years
f. If the State Water Board requests a hazard assessment of a user's premises.
g. If the PWS concludes an existing hazard assessment may no longer accurately represent the degree of hazard.

For subsequent cross-connection hazard re-assessments, procedures for evaluating the backflow protection requirements shall follow the same procedures as the initial hazard assessment.

If an actual or potential hazard is determined to exist, a backflow prevention assembly shall be installed by the Customer in accordance with current District specifications within 45 days of notification, unless the hazard is deemed high enough to require a shorter timeline. All expenses associated with the installation shall be the Customer's responsibility. Existing premises not required to install backflow prevention assemblies as a result of a District Cross-Connection Hazard Assessment shall be subject to subsequent regular District Cross-Connection Hazard Assessments for the purpose of confirming continued compliance pursuant to this Program.

See Appendix I for high hazard cross-connection control premises.

See Appendix J hazard assessment form

4.3 Water User Supervisors

The PWS may require individual water users to designate a water user supervisor for premises with complex piping configurations (i.e. industrial water lines, wastewater treatment, recycled water lines, multiple service connections). The water user supervisor would be responsible for the avoidance of cross-connections on the site.

5 Backflow Prevention

The PWS must ensure that actual and potential cross-connections are eliminated when possible or controlled by the installation of approved BPAs or air gaps consistent with the requirements of the CCCPH Article 3.

The type of protection that shall be provided to prevent backflow into the District water supply system shall be a minimum of a Double Check valve backflow prevention assembly (DC) and Double Check Detector backflow prevention Assembly (DCDA) for all non-residential fire suppression system connections, upgrades, and new installations. Services to Premises that pose an actual or potential health hazard (contaminant) shall be protected with a Reduced Pressure Principle Backflow Prevention Assembly (RP) and Reduced Pressure Principle Detector backflow prevention Assembly (RPDA) for all non-residential fire suppression system connections unless the District determines based on the level of hazard that an air gap separation is required to protect the public water system.

5.1 Backflow Preventer Requirements

The following applies to PWS water users:

1. The PWS will require that water service to water users with identified hazards be protected at the service connection in a manner acceptable to the PWS. All service connections identified as high hazard shall be isolated with an RP or air gap as appropriate.
2. The PWS will require temporary meters (i.e. meters used for temporary service connections at fire hydrants for construction projects) be equipped with an RP.

5.2 Approved BPAs and Installation

The PWS is required to ensure that BPAs are approved and installed in accordance with standards noted in CCCPH Section 3.3.1 and 3.3.2.

All BPAs must be installed in:

a. The orientation for which they are approved;
b. A manner and location that facilitates their proper operation, maintenance, and testing or inspection;
c. A manner that will protect them from weather-related conditions such as flooding and freezing; and
d. Compliance with applicable safety regulations.
e. In accordance with the Uniform Plumbing Code and District's current Design and Construction Standards.

During installation and prior to covering trenches, the District shall visually inspect the connection and entire length of pipeline from the water meter or service connection to the downstream side of the Approved Backflow Prevention Assembly (ABPA) before District acceptance. Backflow prevention assemblies require initial and annual testing, which shall be performed by District approved backflow assembly testers. Any BPA that fails either an initial, or annual test, shall be repaired or replaced within 30 days of notification unless provided an extension in writing from the District cross-connection specialist or face possible discontinuation of water service.

Any repair or replacement of any external components including, but not limited to, assembly housing, shut-off valve, or relief valve housing shall be the responsibility of the Customer. Any replacement of irreparable assembly or installation of a new ABPA shall be performed by the Customer and subject to inspection by the District for compliance with District standards. The District shall not be responsible for any loss or damage directly or indirectly resulting from or caused by any improper or negligent installation, operation, use, repair, or maintenance of, or interference with, any backflow prevention assembly required by this Program, by any Customer or any other person.

The Customer shall own and bear all cost for the installation of all ABPA required in accordance with this Program. Upon notification by the District or a District approved backflow prevention assembly tester, the Customer shall repair or replace existing assemblies determined to be unapproved, defective, damaged or not providing the level of protection specified by this Program. All installations shall comply with the Uniform Plumbing Code and the District's current Design and Construction Standards. The

Customer shall contact the District to request necessary inspections prior to covering pipe and/or connections associated with the installation.

The Customer shall bear all costs that Customer determines are necessary in their sole discretion, for the installation of pumps or renovation of existing Customer piping, as a result of any decreases in line pressure or flow attributed to upgrading or installing an ABPA.

The Customer shall bear all costs that Customer determines are necessary in their sole discretion, for the installation of an expansion tank as a result of potential thermal expansion issues which arise out of creating a closed system by the installation of a backflow prevention assembly.

The Customer shall provide the District and its agents with unimpeded access to backflow prevention assemblies for routine testing and repairs. The District recognizes the potential of freeze damage to ABPAs and associated above ground piping. Commercially available insulated "soft" covers are authorized to be installed by the Customer for the purpose of freeze protection if such a cover provides access for required testing and maintenance.

5.3 Existing Service Connections

Existing unprotected connections are subject to District evaluation and onsite cross-connection control surveys. The District must be provided unimpeded access to perform internal inspections for the purpose of determining cross connection hazards. If District access is impeded for any reason, then the Customer will be required to install a minimum of a RP to protect the public water system.

5.4 Schedule for Installation of BPAs

The following table shows the schedule that the PWS will follow for installation of BPAs when required (based on the hazard assessment).

The PWS may consider granting an extension of time (30 days) for installation of BPA for an existing connection if requested by the premises owner and approved by PWS staff.

Type of Service	Schedule
New connections with identified hazards	Before water service is initiated
Existing connections with high hazards identified	Within 45 days after water user notification (may be shorter based on hazard)
Existing fire protection systems using chemicals or supplied by unapproved auxiliary water source	Within 45 days after water user notification (may be shorter based on hazard)

Existing fire protection systems not using chemicals and supplied by PWS water supply	Within 45 days after water user notification. Upgrade single detector check valve device to an DCDA or RPDA, needs to be completed by 7/1/2034

5.5 Air Gaps

Air gaps must be installed such that:

a. The receiving water container must be located on the water user's premises at the service connection unless an alternative location has been approved by the PWS;
b. All piping between the water user's service connection and the discharge location of the receiving water container must be above finished grade and be accessible for visual inspection unless an alternative piping configuration is approved by the PWS;
c. The PWS must ensure that the air gap meets requirements listed in **Appendix D**; and
d. Any new air gap installation at a water user's service connection must be reviewed and approved by the PWS prior to installation.

5.6 Enforcement

When the water user (customer) fails to install the required backflow protection within 7 days after the due date specified, the PWS will take the following enforcement action:

- The PWS will send a second notice giving the customer an additional 7 days to comply. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in discontinuation of water service.
- If the customer has not complied within 3 days of the due date given in the second notice, the PWS will send a third notice by certified mail and by hand delivery. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in the discontinuation of water service on the specific day noted in the third notice.
- The PWS will send copies of notices to the owner and occupants of the premises (if different from the owner).

5.7 Backflow Protection Levels

Protection levels shall be determined by the District. The following list of circumstances shall require backflow prevention and is not exclusive:

- Premises determined by the District to have unusually complex plumbing configurations that cannot be adequately evaluated
- Premises with limited access or that deny access to the District for internal inspections
- Each service connection that supplies water to Premises on which any substance is or may be handled in such a manner as to permit entry into the public water system, including water originating from the public water system which is or may be subjected to deterioration in sanitary quality

- Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be injected. Irrigation systems that have no other form of backflow protection
- Premises where a cross connection exists, or the potential for one that could result in the pollution or contamination of the public water system
- Premises with any Unapproved Auxiliary Water Supply, whether or not it is interconnected with the public water system, except those premises with a destructed well per County Environmental Health Department standards
- Premises with internal pressure boosting system
- All sewage/wastewater treatment facilities and sewage lift stations

5.7.1 Unapproved Auxiliary Water Supply

Any parcel served by District water service that is determined to have an Unapproved Auxiliary Water Supply, whether or not it is interconnected with the public water system, shall install an ABPA or deactivate the well as defined by this Program upon notification.

5.7.2 Private Wells

A private water well is classified as an Unapproved Auxiliary Water Supply whether or not it is interconnected with the public water system. The Customer may continue to use this Unapproved Auxiliary Water Supply as long as an ABPA has been installed at the point of service connection to District specifications.

New customers requesting District water service who also have a private water well on the parcel will be required to install an ABPA prior to initiation of water service or destroy the well as described in this Program. In circumstances where the private water well is serving an existing structure for domestic purposes and the Customer has notified the District that they intend to destroy the well upon receipt of District water service, a District Cross Connection Control Specialist must be present to observe physical disconnection of the well from its source prior to unlocking the installed District water service. Upon unlocking and initiation of water service, the Customer will be responsible for completing the destruction of the well as described by this Program no later than thirty days following initiation of District water service.

5.8 New Non-Residential Fire Suppression System Connections

All new non-residential fire suppression system connections shall be protected, at a minimum, by an approved DCDA installed according to District specifications.

5.8.1 Existing Residential and Non-Residential Single Detector Check Valve Fire Suppression System Connections

Existing residential and non-residential fire suppression systems currently protected with a minimum of a single detector check valve will be allowed to continue in service until July 1, 2034, at which point an appropriate DCDA or RPDA will need to have been installed by the Customer at the point of connection to District water system according to District specifications to remain in compliance with this Program. If a single detector check valve fire suppression system is modified, updated, improved, or hazard

classification is determined to require an DCDA or RPDA, then that upgrade requirement will supersede the July 1, 2034 deadline.

5.8.2 Residential Fire Suppression System Connections

A residential fire service is a connection which is used both for fire protection and to provide domestic water (to bathrooms, sinks, or other uses not related to fire protection). Backflow protection at the meter shall be dependent on the design of the fire sprinkler suppression system. If the fire sprinkler suppression system is connected to, at a minimum, two domestic plumbing fixtures located in separate rooms then no backflow device is required. If the fire sprinkler suppression system is not connected or only connected to one plumbing fixture, then backflow protection at the meter is required.

The following list of circumstances shall require backflow prevention and is not exclusive:

- Any fire system supplied by or that has the potential to be supplied by an Unapproved Auxiliary Water Supply
- Any fire system in which a chemical or additive has been introduced
- When a separate dedicated water service connection is used solely for a fire suppression system, backflow prevention shall be required for that connection.

If the District determines the existing fire suppression system connections have inadequate protection as described by this Program, upon notification the Customer shall install a backflow prevention assembly according to District specifications. The Customer shall be responsible for meeting local fire district's fire system flow requirements.

Nothing in this Program shall be construed as affecting Customer's responsibility for meeting the local fire district's fire system flow requirements. Nothing in a local fire district's fire system flow requirements shall be construed as affecting Customer's responsibility for meeting the requirements of this Program.

5.9 Temporary Meter Connection

Temporary meter connections to District hydrants, blow-offs, or other District infrastructure shall be protected with a minimum of a RP. The temporary meter and RP shall be installed by a District employee upon Customer submittal of appropriate request form and accompanying deposit to the District. The location of the installed temporary meter connection shall be determined by the District in its sole discretion following review of request form. Customer shall access water at approved location through District-installed gate valve located downstream of RP. Under no circumstances shall Customer operate hydrant, blow-off, or other District infrastructure.

5.9.1 Temporary Construction Connections

Temporary construction connections to District water mains used for the purpose of testing and flushing non-District water lines shall be protected with a minimum of a RP. The RP shall be installed in accordance with the District's current Design and Construction Standards and shall be inspected and certified by a District approved Backflow Prevention Assembly General Tester prior to use and annually

thereafter until completion of the project. Failure to obtain the initial, or annual certification shall result in discontinuation of connection to District water main. Each RP must also be retested by a District approved Backflow Prevention Assembly General Tester upon relocation. The District shall not make repairs to these assemblies.

6 Certified BPA Testers and Certified CCC Specialists

The PWS must ensure all BPA testers and CCC specialists used are certified per CCCPH Article 4

6.1 List of PWS Pre-Approved Certified BPA Testers and CCC Specialists

The PWS will maintain a list of certified BPA testers and CCC Specialists that have been pre-approved by the PWS.

6.2 Pre-approval Qualifications

Certified BPA testers and CCC Specialists who wish to be included on the PWS's pre-approved list and/or provide testing in the PWS's service area must apply to the PWS and furnish the following information:

- Evidence of current certification in good standing;
- Make and model of field-testing equipment (BPA testers only);
- Evidence of test equipment verification of accuracy and/or calibration within the past 12 months (BPA testers only)

6.3 Quality Assurance

The PWS CCC specialist, or designated staff will review BPA inspection/test report forms submitted by the certified BPA testers within 30 days of receipt.

The PWS CCC specialist, or designated staff will provide follow up on test reports that are deficient in any way.

The PWS CCC specialist, or designated staff will report incidences of fraud or gross incompetence on the part of a certified tester to the certifying organization.

7 BPA Testing

The PWS must develop and implement a procedure for ensuring all BPA's are field tested, inspected, and maintained and air gaps are inspected and maintained in accordance with CCCPH Section 3.3.3

7.1 Inspection and Testing of BPAs

All BPAs used for the PWS's CCC Program will be subject to inspection and, if applicable, testing by the PWS. The PWS must have access to the user premises and must ensure that the on-site protection meets the requirements of the CCCPH for installation, field testing, and inspections.

Backflow prevention assembly testers must notify the PWS as soon as possible within 24 hours if a backflow incident or an unprotected cross-connection is observed at the BPA or prior to the user premises during field testing. PWS must immediately conduct an investigation and discontinue service to the user premises if a backflow incident is confirmed, and water service must not be restored to that

user premises until the PWS receives a confirmation of a passing BPA field test from a backflow prevention assembly tester and the assembly is protecting the PWS.

Backflow prevention assembly testers must notate on the test sheet if a water user's BPA has been modified in any way.

Inspection and testing of BPAs will be as follows:

- The PWS's certified CCC specialist will inspect BPAs for proper application (i.e., to ensure that the BPA installed is commensurate with the degree of hazard).
- Either a certified CCC specialist or certified BPA tester will perform inspections of BPAs for correct installation.
- A certified BPA tester will test assemblies.

7.1.2 Frequency of Inspection and Testing

Inspection and testing of BPAs will be conducted:

- At the time of installation;
- Annually (approximately 12 months) or more frequently after installation;
- After a backflow incident; and
- After BPA repair, reinstallation, relocation, or re-plumbing

The PWS, State Water Board, or local health agency may require a BPA to be inspected and/or tested more frequently than once a year.

7.1.3 Responsibility for Inspection and Testing

To ensure that all BPAs are inspected and tested, the PWS will implement the following:

- PWS will require the customer to be responsible for inspection, maintenance, and testing of BPAs that are owned by the customer.

7.1.4 Approved Test Procedures

The PWS will require that all assemblies relied upon to protect the public water system be tested in accordance with test procedures as described in the University of Southern California (USC) Manual of Cross-Connection Control 10th Edition Backflow Test Procedures.

7.1.5 Notification of Routine (i.e. Annual) BPA Testing

The PWS will notify customers via mail delivery who own a BPAs used for public water system protection to have their BPA(s) inspected and/or tested each year. Notices will be sent out not less than 30 days before the due date of the inspection and/or test. The notice will also specify the date (up to 7 days after the due date of the inspection and/or test date) by which the test report must be received by the PWS.

7.1.6 Notification of Non-Routine BPA Testing

In situations when non-routine BPA inspection and/or testing is needed, the PWS will notify customers via mail delivery to have their BPA(s) inspected and/or tested. The notice will also specify the date (up to 7 days after the due date of the inspection and/or test date) by which the test report must be received by the PWS.

7.1.7 Enforcement

When the PWS has not received a test report within 7 days after the due date specified, the PWS will take the following enforcement action:

- The PWS will send a second notice giving the customer an additional 7 days to comply. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in discontinuation of water service.
- If the customer has not complied within 3 days of the due date given in the second notice, the PWS will send a third notice by certified mail and by hand delivery. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in the discontinuation of water service on the specific day noted in the third notice.
- The PWS will send copies of notices to the owner and occupants of the premises (if different from the owner).

8 Recordkeeping

The PWS must develop and implement a recordkeeping system in accordance with the CCCPH Section 3.5.1.

8.1 Types of Records and Data to be Maintained

Each PWS must maintain the following records, which must be available to the State Water Board upon request:

- Two most recent hazard assessments for each customer's premises;
- Information on each BPA used for public water supply protection, including the associated hazard or application, location, owner, type, manufacturer and model, size, installation date (if known), and serial number
- Information on air gaps used for public water supply protection at the service connection, including installation, associated hazard or application, location, owner, and as-built plans of the air gap
- Results of all BPA field testing, air gap inspections, and swivel-ell inspections and field tests for the previous three calendar years, including the BPA tester name and certification number, BPA test date, BPA repair date
- Information on repairs made to, or replacement or relocation of, BPAs for the previous three calendar years
- Information on the most current cross-connection tests performed

- Information on user supervisors if required for customers' premises, including current contact information, any applicable training and qualifications
- Descriptions and follow-up actions related to all backflow incidents
- Information on any contractors used to carry out any tasks involved with the CCC program, including contact information, service contract, etc.
- Public outreach or educational materials for the previous three calendar years.

8.2 Methods of how data is maintained and/or stored

Item	Method (Digital, hard copy, or both)
Hazard Assessments	**Both**
BPA Information	**Both**
Air Gap, Swivel-El Information	**Both**
BPA field test reports	**Both**
BPA Installation, Repair, Replacement	**Both**
Certification information of BPA testers and CCC Specialists	**Both**
Backflow Incident Documentation	**Both**
User Supervisors (if required)	**Both**
Public outreach, Education Materials	**Both**
CCC Program Contractor information (if contractor is used)	**Both**

9 Backflow Incident Response, Reporting, and Notification

The PWS must develop and implement procedures for investigating and responding to suspected or actual backflow incidents in accordance with the CCCPH Section 3.5.

9.1 Backflow Incident Response Plan

The PWS's CCC Specialist will participate in developing a backflow incident response plan. An example backflow incident response form shown in **Appendix G**. The incident response plan will include, but will not be limited to:

- Consideration of complaints or reports of changes in water quality as possible incidents of backflow;
- Water quality sampling and pressure recording;

- Notification of affected service area population;
- Notification and coordination with the other agencies, such as the State Water Board, and the local health jurisdiction;
- Identification of the source of backflow substance and the affected area(s);
- Mitigation measures to correct the problem;
- Application of corrective actions to prevent future backflow occurrences; and
- Documentation of the backflow incident investigation, response, and follow-up actions.

9.2 Backflow Incident Notification

The PWS must notify the State Water Board and local health agencies of any known or suspected incident of backflow within 24 hours of the determination.

State Water Board- Division of Drinking Water Contact Information:
District 01- Klamath
Office Phone: (530) 224-4800
Emergency Phone: (530) 224-4876

10 Public Outreach and Education

The PWS must implement a CCC public outreach and education program element that includes educating PWS staff, customers, and the community about backflow protection and CCC. The PWS may implement this requirement through a variety of methods which may include providing information on CCC and backflow protection.

The District will distribute CCC education materials using the following methods:

- Periodic Water Bill inserts
- Pamphlet distribution
- New customer documentation
- District website- https://humboldtcsd.org/

Examples of education information to be distributed by the PWS can include, but not limited to, the following:

- Cross-connection hazards in general;
- Irrigation system hazards and corrective actions;
- Point-of-use treatment (i.e. household softeners, reverse osmosis units) cross-connection hazards;
- Auxiliary water supply (i.e. privately-owned wells, greywater or other non-potable water use) cross-connection hazards;
- Importance of annual inspection and/or testing of backflow preventers; and

- Thermal expansion in hot water systems when backflow preventers are installed for premises isolation.

11 Local Entity Coordination

Per the CCCPH, the PWS must coordinate with applicable local entities that are involved in either CCC or public health protection to ensure hazard assessments can be performed, appropriate backflow protection is provided and provide assistance in the investigation of backflow incidents. Local entities may include but are not limited to plumbing, permitting, or health officials, law enforcement, fire departments, maintenance, and public and private entities.

11.1 Local Entity Outreach

Below are the local entities the District will coordinate with to promote CCC. This list is not all inclusive, other entities will be added over time as appropriate.

- Humboldt County Building and Planning Department
- Humboldt Bay Fire
- Humboldt County Environmental Health Department
- Public schools within the District's service area
- All District approved backflow testers

Appendix

Appendix A: HCSD Rules and Ordinances

Appendix B: Single Check Fire Protection Service Connections

Appendix C: Detail Drawings for Backflow Prevention Assembly Installation

Appendix D: Air Gap Specifications

Appendix E: Backflow Prevention Assembly Diagrams

Appendix F: Swivel-Ell

Appendix G: Incident Response Reporting Form

Appendix H: Laws regarding CCCPH authority

Appendix I: High Hazard Cross-Connection Premises

Appendix J: Hazard Assessment Form

Appendix K: Backflow Inventory

Appendix A

HCSD Rules and Ordinances

ORDINANCE NO. 2015-01

AN ORDINANCE OF THE HUMBOLDT COMMUNITY SERVICES DISTRICT AMENDING THE HUMBOLDT COMMUNITY SERVICES DISTRICT CODE RELATING TO WATER SERVICE CROSS-CONNECTION PROGRAM

WHEREAS, The Humboldt Community Services District provides water service to the residents of the District; and

WHEREAS, The Board of Directors of the Humboldt Community Services District has determined that a Cross-Connection Program is necessary to systematically and effectively prevent the contamination or pollution of the District's public potable water supply from cross-connections between a customer's potable and non-potable water system, plumbing fixtures and/or industrial piping systems; and

WHEREAS, The Board of Directors of the Humboldt Community Services District finds that District Code Article 4, Section 4.05.140 needs to be amended to include a reference to the District's Cross-Connection Control Program for the Program's elements to be enforceable; and

WHEREAS, The Board of Directors of the Humboldt Community Services District has considered this Ordinance at a duly noticed Public Hearing.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT COMMUNITY SERVICES DISTRICT, AS FOLLOWS:

Section 1: Amend District Code Section 4.05.140 to read as follows:

4.05.140 Cross-Connections.

a) The customer must comply with State and Federal laws governing the separation of dual water systems or installations of backflow protective devices to protect the public water supply from the danger of cross-connections. Backflow protective devices must be installed as near the service as possible and shall be open to test and inspection by the District. Plans for installation of backflow protective devices must be approved by the District prior to installation. All costs associated with the purchase, installation, testing and maintenance of a backflow device shall be the responsibility of the water customer.

b) The District has adopted a "Cross Connection Control Program" effective July 1, 2015. That document, as adopted or as may be amended in the future, shall be used to interpret and apply the sections of this Chapter applicable to cross-connections and provides additional District rules and procedures concerning cross-connections.

Section 2: **Separability**. If a section, subsection, sentence, clause, or phrase of this Ordinance is held to be unconstitutional, or contrary to the general or special laws of the United States or the State of California, the invalidity of such section, subsection, sentence, clause, or phrase shall not affect the remaining portions of this Ordinance.

Ord. 2015-01 Page 1 of 2

Section 3: **Further Action**. The Board of Directors of the District is hereby authorized and directed to take all action necessary or appropriate to effectuate the provisions of this Ordinance.

PASSED AND ADOPTED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT COMMUNITY SERVICES DISTRICT ON THIS 28th DAY OF April 2015 by the following roll call vote:

AYES: Bongio, Gardiner, Saunderson, Scolari, Tyson

NOES: None

ABSENT: None

Approved:

David L. Saunderson, Board President

ATTEST:

Brenda K. Franklin, Board Secretary

Ord. 2015-01 Page 2 of 2

4.01.020 Water Superintendent. The position of Water Superintendent is hereby created. The Water Superintendent or a designated representative shall regularly inspect all physical facilities related to the District water system, to see that they are in good repair and proper working order, and to note violations of any water regulations. The Water Superintendent is responsible for determining whether or not a cross-connection hazard exists and what type of backflow protection is required. (Ord. 4, §51, revised by Ord. 88-1, §2, 1988)

4.05.140 Cross-Connections.

a) The customer must comply with State and Federal laws governing the separation of dual water systems or installations of backflow protective devices to protect the public water supply from the danger of cross-connections. Backflow protective devices must be installed as near the service as possible and shall be open to test and inspection by the District. Plans for installation of backflow protective devices must be approved by the District prior to installation. All costs associated with the purchase, installation, testing and maintenance of a backflow device shall be the responsibility of the water customer.

b) The District has adopted a "Cross Connection Control Program" effective July 1, 2015. That document, as adopted or as may be amended in the future, shall be used to interpret and apply the sections of this Chapter applicable to cross-connections and provides additional District rules and procedures concerning cross-connections. (Ord. 2015-1, §1, 2015)

4.05.150 Cross Connection - Special Cases. In special circumstances, when the customer is engaged in the handling of especially dangerous or corrosive liquids or industrial or process waters, the District may require the customer to eliminate certain plumbing or piping connections as an additional precaution and as a protection to the back flow preventive devices. (Ord. 4, §147, 1954)

4.05.160 Relief Valves. As a protection to the customer's plumbing system, a suitable pressure relief valve must be installed and maintained by him at his expense, HCSD CODE Page 16 of 110 when check valves or other protective devices are used. The relief valve shall be installed between the check valves and the water heater. (Ord. 4, §148, 1954)

4.05.180 Cross Connection - Inspection. The double check valve or other approved backflow protection devices must be inspected and tested at least annually or more often if inspections indicate any occasion of failure. Any costs associated with inspection, testing, repair or replacement of the device shall be the responsibility of the water customer. Inspections and tests must be made by a certified cross-connection specialist acceptable to the District or by the District's personnel. (Ord. 4, §150, amended by Ord. 88-1, §3, 1988)

4.05.190 Cross Connection – Discontinued Service. The service of water to any premises may be immediately discontinued by the District if any defect is found in the check valve installations or other protective devices, or if it is found that dangerous unprotected cross-connections exist. Service will not be restored until such defects are corrected. (Ord. 4, §151, 1954)

4.05.200 Interruptions in Service. The District shall not be liable for damage which may result from an interruption in service from a cause beyond the

control of the Water Department. (Ord. 4, §152, 1954)

4.05.210 Ingress and Egress. Representatives from the Water Department shall have the right of ingress and egress to the customers' premises at reasonable hours for any purpose reasonably connected with the furnishing of water service. (Ord.4, §153, 1954)

7.01.020 Monthly Water Service Rates. There will be a monthly rate for water service provided by the District which rate shall be the total of the following items:

A. Monthly Base Rate, as defined in Section 7.01.030,

B. Monthly Consumption Charge, as defined in Section 7.01.040, and

C. Monthly Fire Protection Charge if applicable, as defined in Section 7.01.050.

D. Monthly Backflow Prevention Device Charges if applicable, as defined in Section 7.01.055 (Ord. 2002-01, §2, 2002, 07/28/09)

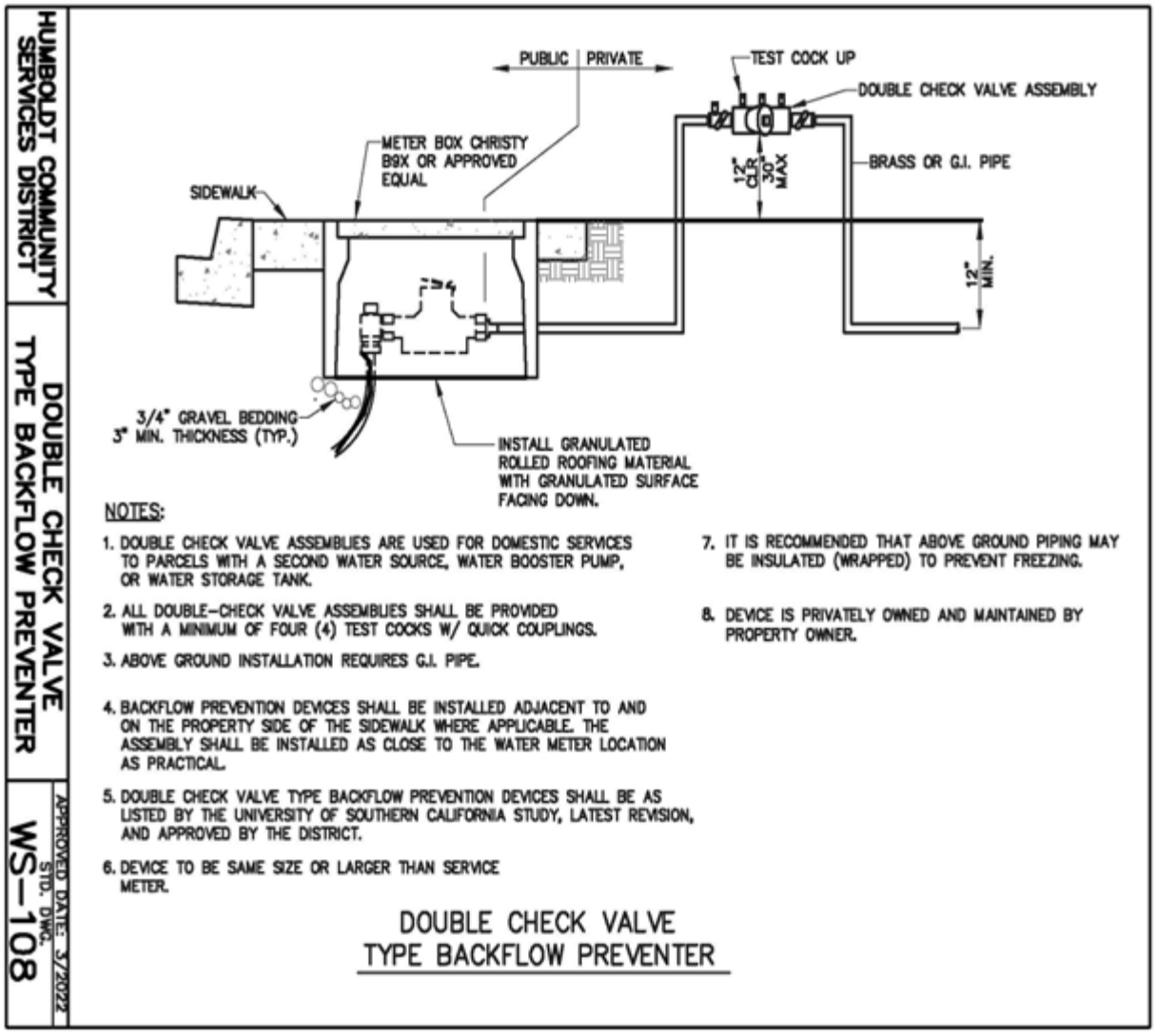
7.01.055 Backflow Prevention Device Charges. Maintenance and testing of these devices is the responsibility of the customer. The District may choose to provide the required testing of the backflow prevention device per the adopted Cross-Connection Control Program and as per current adopted resolution setting backflow prevention device testing fees. (Ord. 2015-02, §1, 2015)

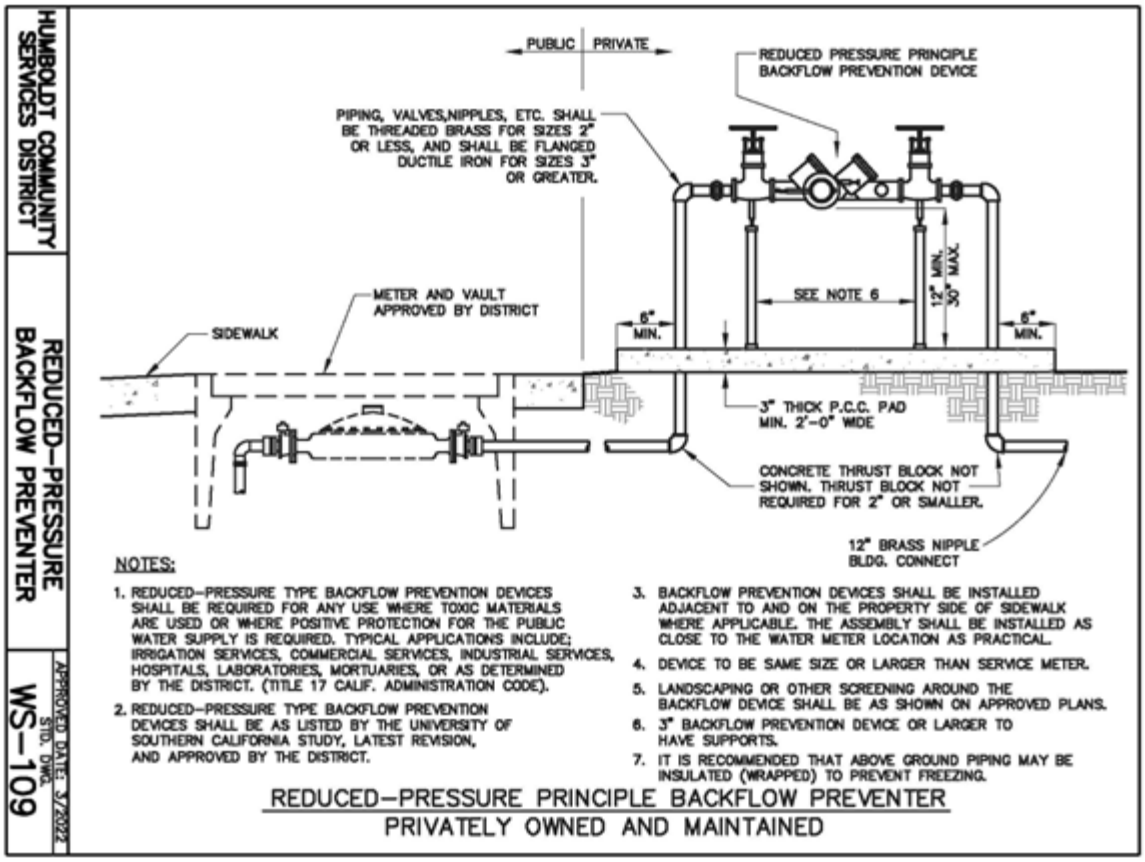
Appendix B

Single Check Fire Protection Service Connections

Appendix C

Detail Drawings for Backflow Prevention Assembly Installation



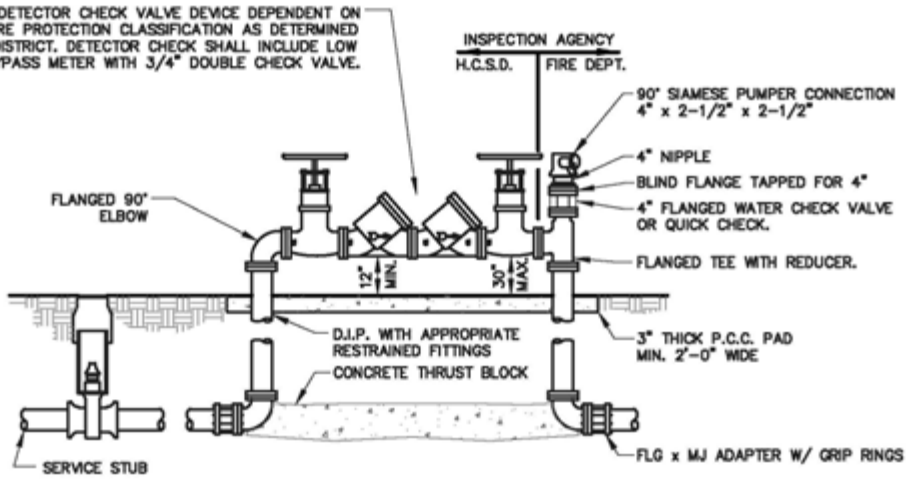

HUMBOLDT COMMUNITY SERVICES DISTRICT
REDUCED-PRESSURE BACKFLOW PREVENTER
WS-109
APPROVED DATE: 3/2022
STD. DWG.
PUBLIC
PRIVATE
REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE
PIPING, VALVES,NIPPLES, ETC. SHALL BE THREADED BRASS FOR SIZES 2" OR LESS, AND SHALL BE FLANGED DUCTILE IRON FOR SIZES 3" OR GREATER.
METER AND VAULT APPROVED BY DISTRICT
SIDEWALK
SEE NOTE 6
12" MIN. 30" MAX.
6" MIN.
6" MIN.
3" THICK P.C.C. PAD MIN. 2'-0" WIDE
CONCRETE THRUST BLOCK NOT SHOWN. THRUST BLOCK NOT REQUIRED FOR 2" OR SMALLER.
12" BRASS NIPPLE BLDG. CONNECT
NOTES:
1. REDUCED-PRESSURE TYPE BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED FOR ANY USE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE; IRRIGATION SERVICES, COMMERCIAL SERVICES, INDUSTRIAL SERVICES, HOSPITALS, LABORATORIES, MORTUARIES, OR AS DETERMINED BY THE DISTRICT. (TITLE 17 CALIF. ADMINISTRATION CODE).
2. REDUCED-PRESSURE TYPE BACKFLOW PREVENTION DEVICES SHALL BE AS LISTED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA STUDY, LATEST REVISION, AND APPROVED BY THE DISTRICT.
3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON THE PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. THE ASSEMBLY SHALL BE INSTALLED AS CLOSE TO THE WATER METER LOCATION AS PRACTICAL.
4. DEVICE TO BE SAME SIZE OR LARGER THAN SERVICE METER.
5. LANDSCAPING OR OTHER SCREENING AROUND THE BACKFLOW DEVICE SHALL BE AS SHOWN ON APPROVED PLANS.
6. 3" BACKFLOW PREVENTION DEVICE OR LARGER TO HAVE SUPPORTS.
7. IT IS RECOMMENDED THAT ABOVE GROUND PIPING MAY BE INSULATED (WRAPPED) TO PREVENT FREEZING.
REDUCED-PRESSURE PRINCIPLE BACKFLOW PREVENTER
PRIVATELY OWNED AND MAINTAINED

HUMBOLDT COMMUNITY SERVICES DISTRICT

DOUBLE DETECTOR CHECK VALVE SINGLE SERVICE

STD. DWG. WS-110

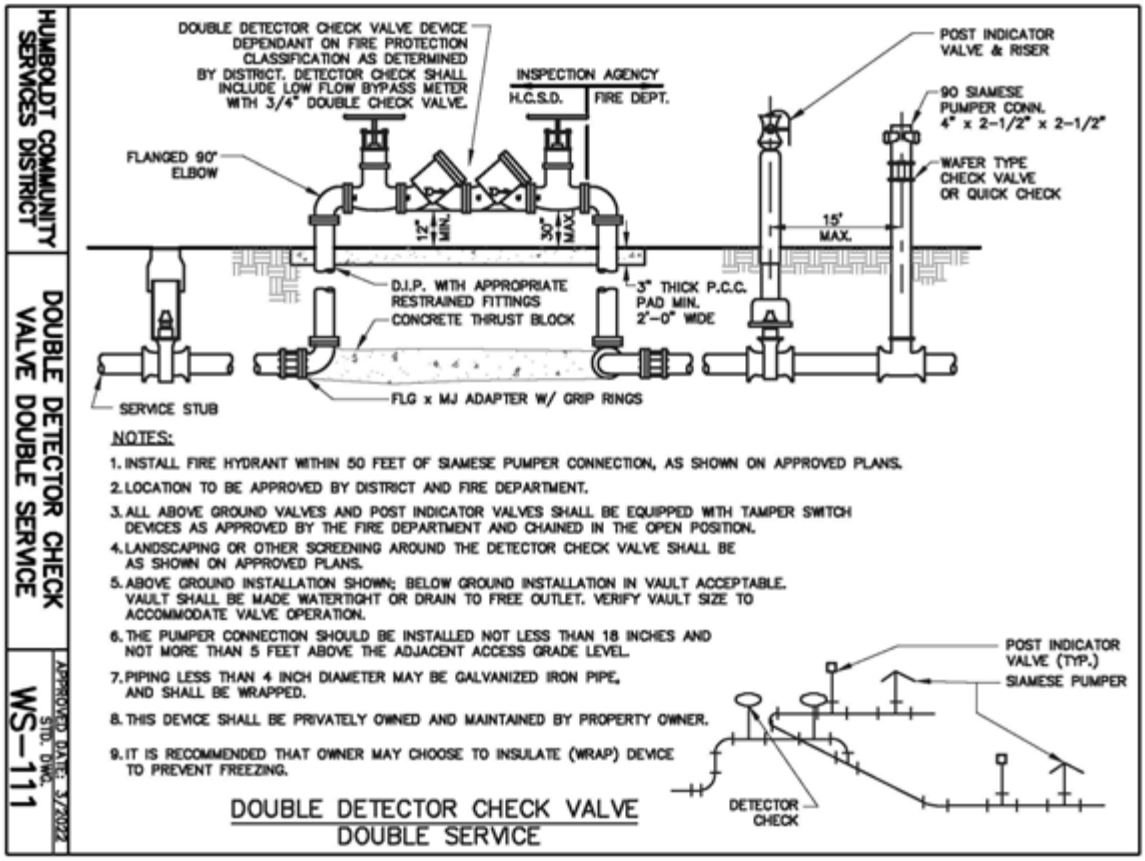
APPROVED DATE: 3/2022



NOTES:

1. INSTALL FIRE HYDRANT WITHIN 50 FEET OF SIAMESE PUMPER CONNECTION, AS SHOWN ON APPROVED PLANS.
2. LOCATION TO BE APPROVED BY DISTRICT AND FIRE DEPARTMENT.
3. ALL ABOVE GROUND VALVES AND POST INDICATOR VALVES SHALL BE EQUIPPED WITH TAMPER SWITCH DEVICES AS APPROVED BY THE FIRE DEPARTMENT AND CHAINED IN THE OPEN POSITION.
4. LANDSCAPING OR OTHER SCREENING AROUND THE DETECTOR CHECK VALVE SHALL BE AS SHOWN ON APPROVED PLANS.
5. ABOVE GROUND INSTALLATION SHOWN; BELOW GROUND INSTALLATION IN VAULT ACCEPTABLE. VAULT SHALL BE MADE WATERTIGHT OR DRAIN TO FREE OUTLET. VERIFY VAULT SIZE TO ACCOMMODATE VALVE OPERATION.
6. THE PUMPER CONNECTION SHOULD BE INSTALLED NOT LESS THAN 18 INCHES AND NOT MORE THAN 5 FEET ABOVE THE ADJACENT ACCESS GRADE LEVEL.
7. PIPING LESS THAN 4 INCH DIAMETER MAY BE GALVANIZED IRON PIPE, AND SHALL BE WRAPPED.
8. THIS DEVICE SHALL BE PRIVATELY OWNED AND MAINTAINED BY PROPERTY OWNER.
9. IT IS RECOMMENDED THAT OWNER MAY CHOOSE TO INSULATE (WRAP) DEVICE TO PREVENT FREEZING.

DOUBLE DETECTOR CHECK VALVE
SINGLE SERVICE


HUMBOLDT COMMUNITY SERVICES DISTRICT
DOUBLE DETECTOR CHECK VALVE DOUBLE SERVICE
WS-111
STD. DWG.
APPROVED DATE: 3/2022
DOUBLE DETECTOR CHECK VALVE DEVICE DEPENDANT ON FIRE PROTECTION CLASSIFICATION AS DETERMINED BY DISTRICT. DETECTOR CHECK SHALL INCLUDE LOW FLOW BYPASS METER WITH 3/4" DOUBLE CHECK VALVE.
INSPECTION AGENCY
H.C.S.D.
FIRE DEPT.
POST INDICATOR VALVE & RISER
90 SIAMESE PUMPER CONN. 4" x 2-1/2" x 2-1/2"
FLANGED 90° ELBOW
WAFER TYPE CHECK VALVE OR QUICK CHECK
12" MIN.
30" MAX.
15' MAX.
D.I.P. WITH APPROPRIATE RESTRAINED FITTINGS
CONCRETE THRUST BLOCK
3" THICK P.C.C. PAD MIN. 2'-0" WIDE
SERVICE STUB
FLG x MJ ADAPTER W/ GRIP RINGS
NOTES:
1. INSTALL FIRE HYDRANT WITHIN 50 FEET OF SIAMESE PUMPER CONNECTION, AS SHOWN ON APPROVED PLANS.
2. LOCATION TO BE APPROVED BY DISTRICT AND FIRE DEPARTMENT.
3. ALL ABOVE GROUND VALVES AND POST INDICATOR VALVES SHALL BE EQUIPPED WITH TAMPER SWITCH DEVICES AS APPROVED BY THE FIRE DEPARTMENT AND CHAINED IN THE OPEN POSITION.
4. LANDSCAPING OR OTHER SCREENING AROUND THE DETECTOR CHECK VALVE SHALL BE AS SHOWN ON APPROVED PLANS.
5. ABOVE GROUND INSTALLATION SHOWN; BELOW GROUND INSTALLATION IN VAULT ACCEPTABLE. VAULT SHALL BE MADE WATERTIGHT OR DRAIN TO FREE OUTLET. VERIFY VAULT SIZE TO ACCOMMODATE VALVE OPERATION.
6. THE PUMPER CONNECTION SHOULD BE INSTALLED NOT LESS THAN 18 INCHES AND NOT MORE THAN 5 FEET ABOVE THE ADJACENT ACCESS GRADE LEVEL.
7. PIPING LESS THAN 4 INCH DIAMETER MAY BE GALVANIZED IRON PIPE, AND SHALL BE WRAPPED.
8. THIS DEVICE SHALL BE PRIVATELY OWNED AND MAINTAINED BY PROPERTY OWNER.
9. IT IS RECOMMENDED THAT OWNER MAY CHOOSE TO INSULATE (WRAP) DEVICE TO PREVENT FREEZING.
POST INDICATOR VALVE (TYP.)
SIAMESE PUMPER
DETECTOR CHECK
DOUBLE DETECTOR CHECK VALVE
DOUBLE SERVICE

Appendix D

Air Gap Specifications

ASME A112.1.2-2012(R2017) Table 1, Minimum Air Gaps for Generally used Plumbing Fixtures, [1] page 4

Table 1

Minimum Air Gaps for Generally used Plumbing Fixtures[4]

Fixtures	WHERE NOT AFFECTED BY SIDEWALLS[1] (inches)	WHERE AFFECTED BY SIDEWALLS[2] (inches)
Effective opening[3] not greater than ½ of an inch in diameter	1	1 ½
Effective openings[3] not greater than ¾ of an inch in diameter	1 ½	2 ¼
Effective openings[3] not greater than 1 inch in diameter	2	3
Effective openings[3] greater than 1 inch in diameter	Two times the diameter of effective opening	Three times the diameter of effective opening

For SI units: 1 inch = 25.4 mm

Notes:

[1] Sidewalls, ribs, or similar obstructions do not affect air gaps where spaced from the inside edge of the spout opening at a distance exceeding three times the diameter of the effective opening for a single wall, or at a distance exceeding four times the effective opening for two intersecting walls.
[2] Vertical walls, ribs, or similar obstructions extending from the water surface to or above the horizontal plane of the spout opening other than specified in Footnote 1 above. The effect of three or more such

vertical walls or ribs has not been determined. In such cases, the air gap shall be measured from the top of the wall.

[3] The effective opening shall be the minimum cross-sectional area at the seat of the control valve pr the supply pipe or tubing that feeds the device or outlet. Where two or more lines supply one outlet, the effective opening shall be the sum of the cross-sectional areas of the individual supply lines or the area of the single outlet, whichever is smaller.

[4] Air gaps less than 1 inch (25.4 mm) shall be approved as a permanent part of a listed assembly that has been tested under actual backflow conditions with vacuums of 0 to 25 inches of mercury (85 kPa).

Appendix E

Backflow Prevention Assembly Diagrams

Diagram 1
Double check detector backflow prevention assembly[1]

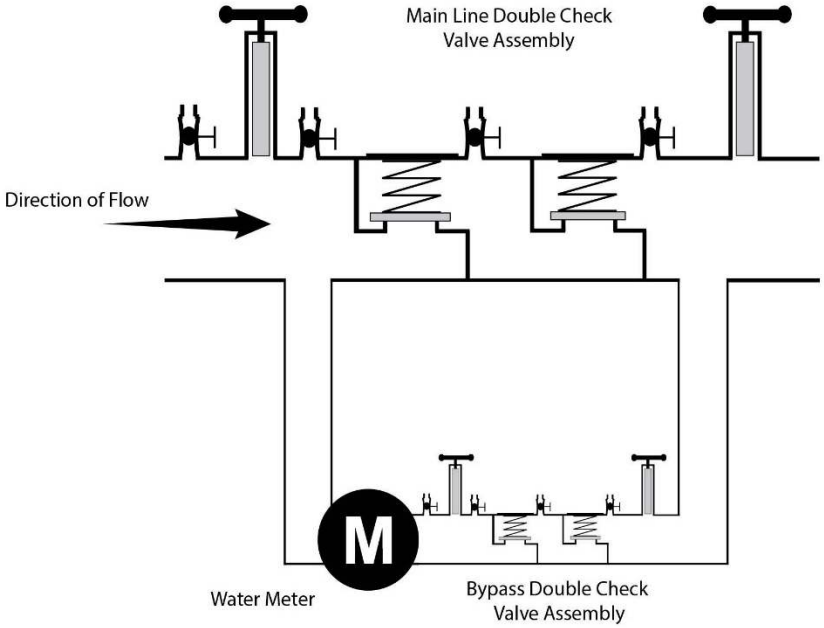


Diagram 2
Double check valve backflow prevention assembly[3]

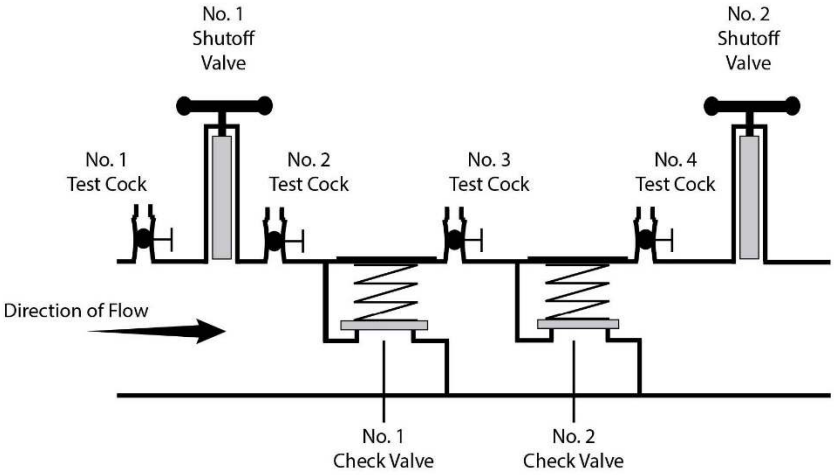


Diagram 3
Pressure vacuum breaker backsiphonage prevention assembly [4]

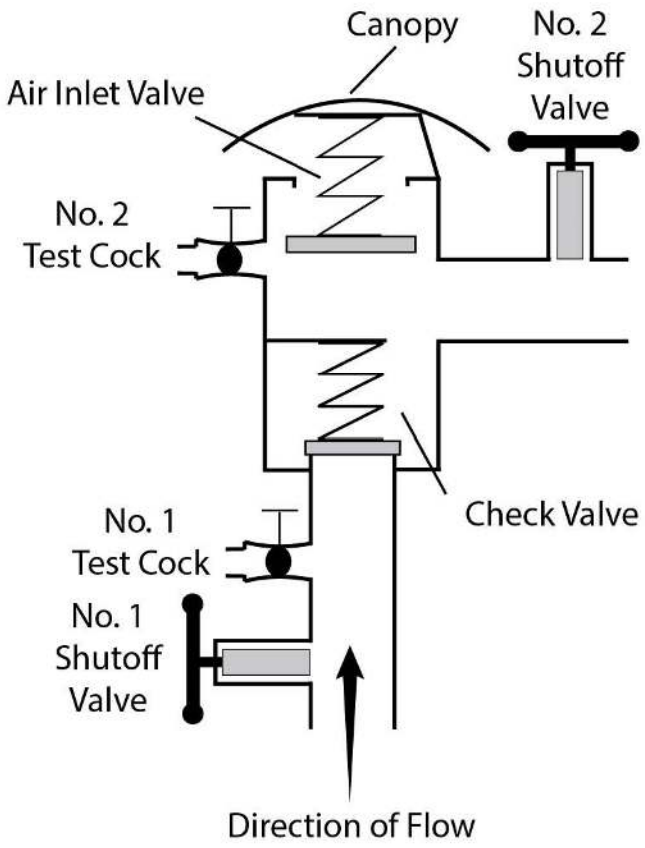


Diagram 4
Reduced pressure principle backflow prevention assembly [5]

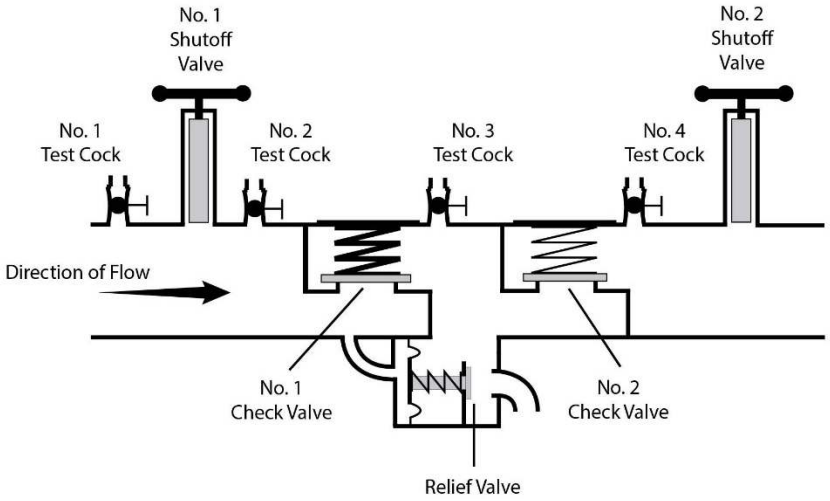


Diagram 5
Reduced pressure principle detector backflow prevention assembly [6]

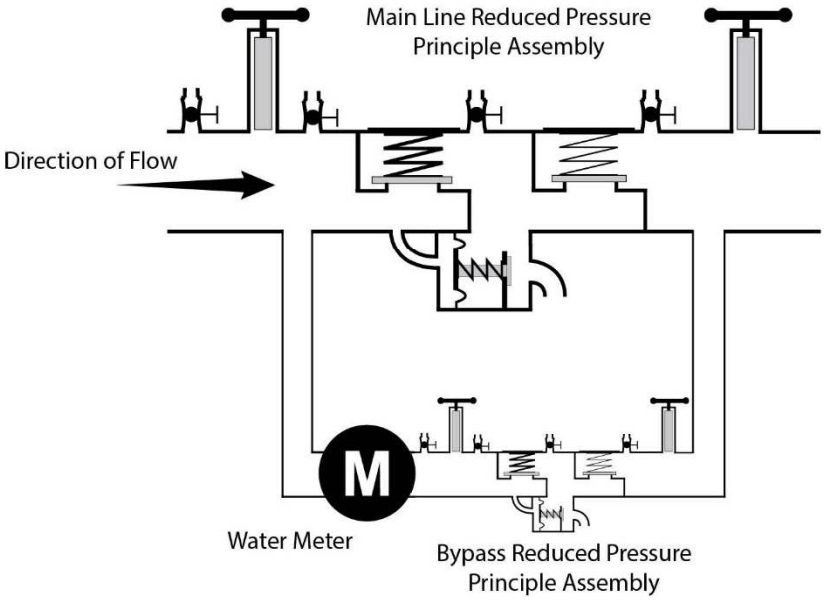
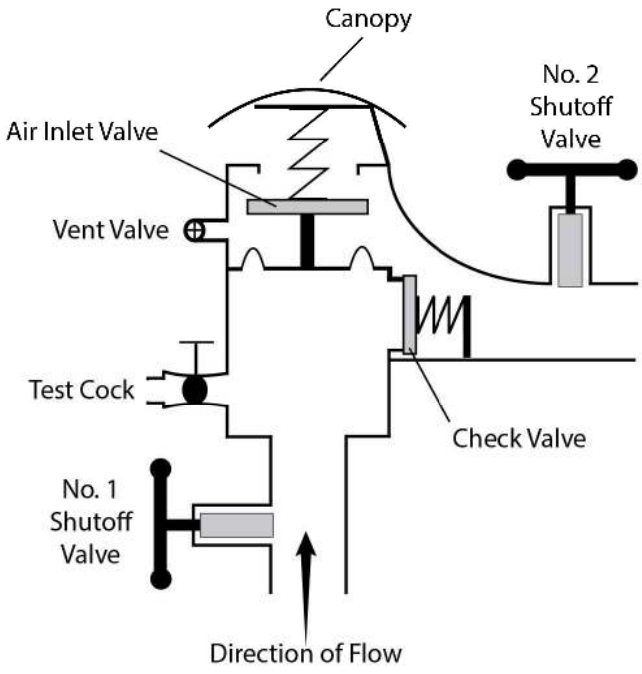


Diagram 6
Spill-resistant pressure vacuum breaker backsiphonage prevention assembly [8]



Appendix F

Swivel-Ell

Swivel-Ell Design and Construction Criteria

The criteria below, in conjunction with the swivel-ell diagrams that follow (Diagrams 7a and 7b), are **minimum** acceptable design and construction-related requirements for utilizing a swivel-ell. For restrictions and allowances for utilizing a swivel-ell, see CCCPH section 3.2.2.

A. Prior to operation of a swivel-ell, the PWS will receive approval for the design and construction plans of that swivel-ell from the State Water Board.

B. The drinking water supply must not, under any circumstances, be directly connected to the recycled water supply, nor be designed such that the recycled water use site could be supplied concurrently by a recycled water supply and a drinking water supply.

C. The drinking water supply line and the recycled water supply line must be offset (see Diagram 7b) in a manner that ensures a tee-connection, spool, or other prefabricated mechanical appurtenance(s) could not be readily utilized in lieu of the swivel-ell connection, nor result in the recycled water use site being supplied concurrently by recycled water and drinking water.

D. The recycled water supply line used in conjunction with the swivel-ell must be the only recycled water supply to the recycled water use area.

E. The swivel-ell must be located as close as practical to the public water system service connection, with the swivel-ell connection being located as close as practical to the RP upstream of the swivel-ell.

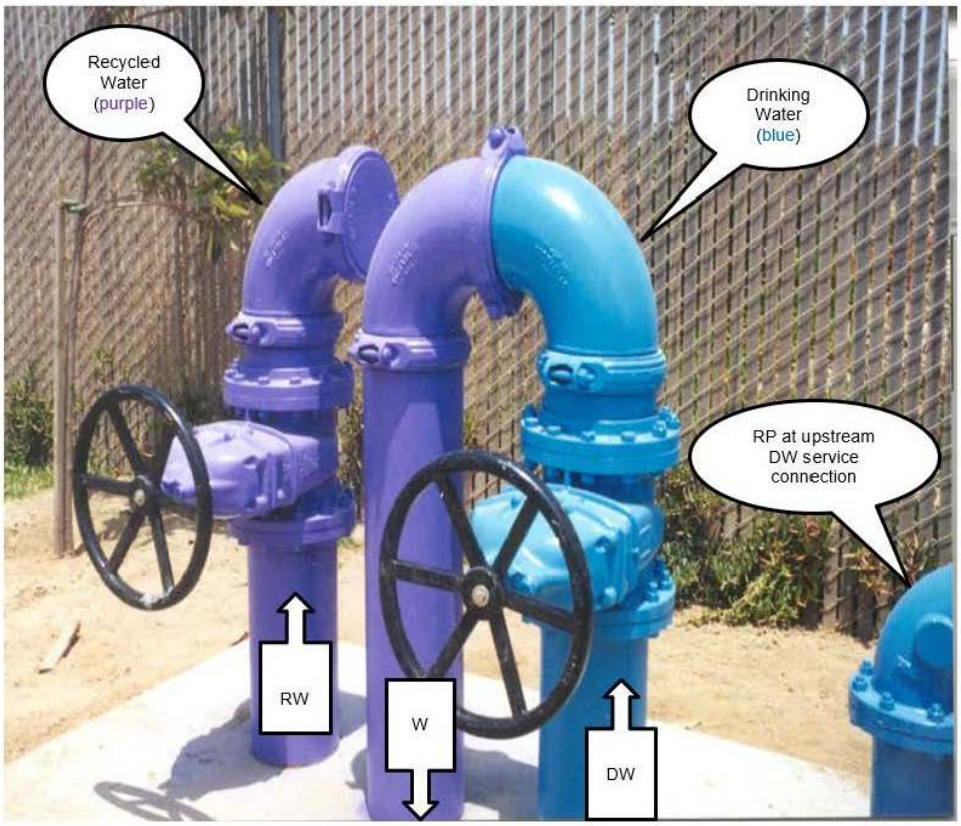
F. The swivel-ell must:

1. be located above ground;
2. be color-coded pursuant to section 116815 of the CHSC and its implementing regulations;
3. include appropriate signage, as required by regulation and the State Water Board;
4. be provided the security necessary to prevent interconnections, vandalism, unauthorized entry, etc.; and
5. be provided with meters on both the recycled water service and drinking water service connections.

Legend for Diagram 7a and 7b (also see next page)

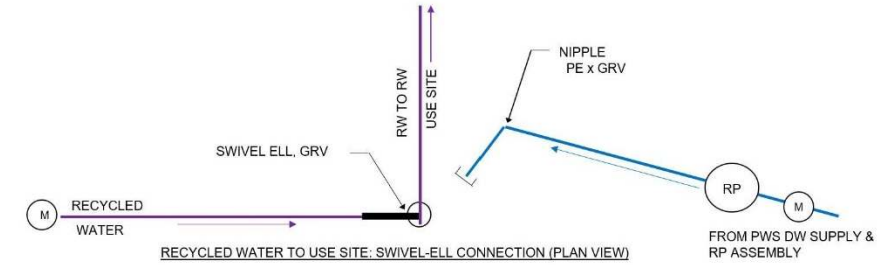
RP	=	Reduced pressure principle backflow prevention assembly
RW	=	Tertiary-treated recycled water originating from wastewater treatment facility
DW	=	Drinking water originating from a public water system
W	=	Water (tertiary recycled water **or** drinking water) to use site. As pictured, configured for supplemental drinking water to the use site.
M	=	Meter (*next page*)
PE	=	Plain End (*next page*)
GRV	=	Groove (*next page*)
PWS	=	Public Water System (*next page*)

Diagram 7a: Example Swivel-Ell Pictorial (also see Plan View Schematics)

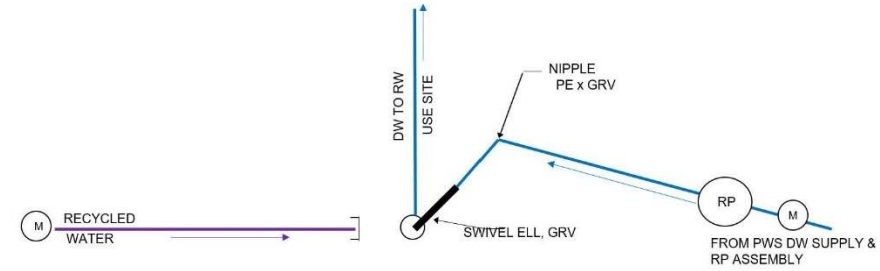


Note: The RP, a required component of an acceptable swivel-ell, is not shown in the picture.

Diagram 7b: Swivel-Ell Typical Plan View Schematics
(not intended to be an exact portrayal of the pictorial)



RECYCLED WATER TO USE SITE: SWIVEL-ELL CONNECTION (PLAN VIEW)



POTABLE WATER TO USE SITE: SWIVEL-ELL CONNECTION (PLAN VIEW)

Appendix G

Incident Response Reporting Form

BACKFLOW INCIDENT REPORT FORM

Water System: _____

Water System Number: _____

Incident Date: _____

Incident Time (if known):_____

Incident Location: _____

How was the incident discovered?

_____

Backflow Originated from:

Premise Location: _____

Address: _____

Premise Contact Person: _____ Title:_____

Phone: _____ Email: _____

Connection Type: (please check one)

Industrial ☐ Commercial ☐ Single-Family Residential ☐ Multi-Family Residential ☐

Irrigation ☐ Recycled Water ☐ Water System Facility ☐

Other: _____

Description and source of backflow substance (please be as descriptive as possible):

_____

If available, please attach an MSDS or other chemical description form

Was the backflow fluid contained within the user side? YES NO

Estimated Number of Affected Persons: _____

Number and description of consumer complaints received:

Did any consumers report illness? Please describe.

_____

If applicable, please describe the consumer notification:

_____

INVESTIGATION

Please describe the water system investigation including time frames:

_____

_____

_____

What was the area system pressure? _____

Is this within typical range: YES NO - typical pressure: _____

Was a sample of the water contaminated by the backflow incident collected and stored before flushing? YES NO

Please describe all sampling:

_____

DDW recommends laboratory or field sampling for the following parameters: total coliform, E. coli, free and total chlorine residual, pH, odor, turbidity, temperature, and color. Additional sampling should be collected at the PWS and regulatory agency's discretion.

CORRECTIVE ACTIONS

Please describe the corrective actions taken by the water system:

_____

_____

Was the chlorine residual increased after discovery of backflow incident? YES NO

Date of the last cross-connection control hazard assessment of the premise where the backflow incident occurred: _____

Did the premise have backflow prevention assemblies? YES NO

Date of most recent backflow prevention assembly test(s): _____

When was the Division of Drinking Water or Local County Health office notified?

Date: _____Time: _____ Contact Person: _____

Was the Division or Local County Health notified within 24 hours? YES NO

Other agencies or organizations contacted?

CERTIFICATION

Name: _____ Job Title: _____

Certification(s): _____

Please list all cross-connection control related certifications including number and expiration date

I certify that the forgoing information is true and correct to the best of my ability.

Signature: _____ Date: _____

Attach the following applicable documentation
1. Laboratory Test Results
2. Sketch of the cross-connection and modifications
3. MSDS or chemical information forms if chemical hazard is known
4. Applicable backflow assembly test reports including the most recent test before the incident
5. Other relevant supporting documentation

Appendix H

Laws regarding CCCPH authority

The following laws and regulations are considered related or tangential to the CCCPH, and are included in a descriptive format to provide additional, relevant background information

California Laws and Regulations

In addition to the California SDWA statutory requirements cited in CCCPH Chapter 1, section 1.3.1, California has statutes addressing certain authorities and requirements that may have influenced the CCCPH or may otherwise be of interest.

- Urban and community water systems must have a written policy on discontinuation of residential service for nonpayment and must not discontinue residential service for nonpayment if certain conditions are met. (CHSC sections 116900 – 116926)

- Senate Bill 1263 (2017) requires that before a person submits an application for a permit for a proposed new public water system, the person shall first submit a preliminary technical report which must include a cost comparison of a new public water system and consolidations with an existing system. (CHSC section 116527)

- Effective June 24, 2015, Senate Bill 88 (SB 88) (Statutes 2015, Chapter 27) added sections 116680-116684 to the CHSC, allowing the State Water Board to require certain water systems that consistently fail to provide safe drinking water to consolidate with, or receive an extension of service from, another public water system. The consolidation can be physical or managerial.

- Local health officers may maintain programs for the control of cross-connections by water users, within water users' premises, where public exposure to backflow may occur. Such programs may include water user premises inspections, collection of fees, certification of backflow prevention assembly[1] (BPA) testers, and other discretionary elements. Local health officer BPA tester certification standards must be consistent with the standards prescribed in the CCCPH. Water users are required to comply with all orders, instructions, regulations, and notices from the local health officer regarding installation, testing, and maintenance of a BPA. (CHSC sections 116800 - 116820).

- Pursuant to the California Building Standards Law (CHSC sections 18901 - 18949.31), the California Building Standards Commission (CBSC) must administer the processes related to the adoption, approval, and publication of regulations referred to as the California Building Standards Code (Title 24, California Code of Regulation). Title 24 serves as the basis for the minimum design and construction of buildings in California and includes the California Plumbing Code (Part 5 of Title 24), which contains requirements pertaining to cross-connection control

and backflow prevention.

- A BPA intended to convey or dispense water for human consumption via drinking or cooking must meet California's "lead free" requirements. (CHSC section 116875)

- Limits are established for the installation of backflow protection equipment where automatic fire sprinkler systems are utilized. (CHSC section 13114.7)[2]

- Cross-connection control must be addressed in engineering reports that are required (CCR Title 22, section 60323) for recycled water projects. (Wat. Code section 13552.8)

- If a public agency requires the use of recycled water for toilet and urinal flushing in a structure (except certain mental health facilities), the public health agency must prepare an engineering report that addresses cross-connection control. (Wat. Code section 13554)

- Prior to indoor use of recycled water in a condominium project, the entity delivering the recycled water must submit a report, for State Water Board[3] approval, and include the following related to cross-connection control (Wat. Code section13553(d)(1)):
    - The condominium project must be provided with a backflow prevention assembly approved by the State Water Board.
    - The backflow prevention assembly must be inspected and tested annually by a certified tester.
    - The condominium project must be tested by the recycled water agency or local agency at least once every four years for indications of possible cross-connections between the condominium's potable and non-potable systems.

- California's Department of Water Resources was required to convene a task force, known as the 2002 Recycled Water Task Force, to identify constraints, impediments, and opportunities for the increased use of recycled water and report to the Legislature by July 1, 2003. The task force was also asked to advise and make recommendations concerning cross-connection control, including the applicability of visual inspections instead of pressure tests for cross-connections between potable and non-potable water systems. (Wat. Code section 13578(b)(1). The final report[4] provided the following recommendations to the State Water Board– Division of Drinking Water (Division):
    - Prepare guidance on dual plumbed regulations (22 CCR sections 60313-60316) consistent with Appendix J of plumbing code (Chapter 15 of 2019 California Plumbing Code, formerly Chapter 16A).
    - Support thorough assessment of risk associated with cross-connections between disinfection tertiary recycled water and potable water.
    - Ensure uniform interpretation of cross-connection control requirement of Title 22 regulations (recycled water) and Title 17 (cross-connection control regulations)

- Recommend stakeholders to review draft Title 17 regulations.

- A person engaged in the salvage, purchase, or sale of scrap metal who knowingly possesses a backflow prevention assembly (or connections to the assembly or any part of the assembly), or who failed to report the possession of such items, which was previously owned by a utility or public agency, is guilty of a crime. (Pen. Code section 496e)

- Junk dealers or recyclers who possess a backflow prevention assembly (or connections to that assembly or any part of the assembly) without a written certification from the agency or utility owning or previously owning the assembly will be liable to the agency or utility for the wrongful possession. (Civ. Code section 3336.5 and, similarly, Bus. & Prof. Code section 21609.1)

Please note that a number of the codes, regulations, and statutes cited above are implemented under the authority of regulatory entities other than the State Water Board and would therefore be beyond the scope of this CCCPH. The intent of providing such citations is to increase general awareness with respect to other potential statutory requirements associated with cross-connection control. The list is not exhaustive and does not include other requirements that may exist, including those via regulations that may have been adopted by an appropriate regulatory entity.

Federal Laws and Regulations

All suppliers of domestic water to the public are subject to regulations adopted by the U.S. Environmental Protection Agency (EPA) under the U.S. Safe Drinking Water Act (SDWA) of 1974, as amended (42 U.S.C. section 300f et seq.), as well as by the State Board under the California SDWA (Health & Saf. Code, div. 104, pt. 12, ch. 4, section 116270 et seq.). Additionally, the State Water Board has been delegated primacy – the responsibility and authority to administer U.S. EPA's drinking water regulations within California – on the condition that California adopt enforceable requirements no less stringent than U.S. EPA's.

The U.S. EPA currently has no distinct cross-connection control requirements that apply broadly to public water systems (PWS); however, the importance of cross-connection control is evident by the issue papers and guidance documents developed by U.S. EPA and their recognition that cross-connections and backflow represent a significant public health risk (see discussion in Chapter 2). Although U.S. EPA currently has no distinct cross-connection control requirements, the subject of cross-connection or backflow prevention assemblies is included in the U.S. SDWA and the Code of Federal Regulations (C.F.R.) in relation to PWS, including the following:[5]

- If used exclusively for non-potable services, a backflow prevention assembly (BPA) is exempt from the federal lead prohibitions. (42, U.S.C. section 300g)

- Allows increasing disinfectant concentrations in a PWS distribution system in the event of a cross-connection (backflow) event. (40 C.F.R. section 141.130(d))

- Proper maintenance of the distribution system, including cross-connection control, is identified as a best available technology (BAT) for microbial contaminant control. (40 C.F.R. section 141.63(e))

- Under the federal Revised Total Coliform Rule, a PWS having a cross-connection control program is one of the enhancements necessary to reduce monitoring for a PWS that had been under an increased monitoring frequency. (40 C.F.R. section 141.854(h)(2))

- Under the federal Revised Total Coliform Rule, a PWS having a cross-connection control program is a criterion for a state to allow a reduced monitoring frequency (40 C.F.R. section 141.855(d)(1))

- If a state allows the monitoring frequency reductions previously mentioned under the federal Revised Total Coliform Rule, a state is required to include in its primacy package to U.S. EPA how a PWS will be required to demonstrate cross-connection control. (40 C.F.R. section 142.16(q))

[1] California statutes use a variety of terms when referencing a 'backflow prevention assembly' (e.g., backflow protective device, backflow protection equipment, backflow prevention device, backflow or back
siphonage protection device, backflow preventer, or backflow device). For consistency with industry terminology, 'backflow prevention assembly' is used in the CCCPH, unless directly quoted otherwise.
[2] CHSC section 13114.7 historically provided potential limits for backflow prevention assemblies on fire sprinklers. Even though current standards differ from the language stated in CHSC section 13114.7, it is still being provided as a historical reference as there may still be installations with the now outdated limits established in section 13114.7
[3] The California Department of Public Health's authority and responsibility pertaining to this reference was transferred to the State Water Board via Senate Bill 861 (2014, Chapter 35). As such, applicable statutory mandates that may refer to "California Department of Public Health" or "Department" may be referred to as "State Water Board" in this document.
[4] California Department of Water Resources. (2003). Water Recycling 2030: Recommendations of California's Recycled Water Task Force
[5] For requirements unrelated to cross-connection control, please consult California's laws and regulations specific to the topic of interest. California may have more stringent requirements (e.g., reduced monitoring allowed via federal regulations may be prohibited in California).

Appendix I

HIGH HAZARD CROSS-CONNECTION PREMISES

The list below identifies premises that require backflow protection provided by an air gap or a reduced pressure principle backflow prevention assembly, unless noted otherwise. The list below is not intended to be all-inclusive. A PWS, State Water Board, or local health agency may require an AG, RP, or both to protect a PWS from other hazards not listed below and identified in premises through the hazard assessment completed in CCCPH Chapter 3, section 3.2.1. A PWS may reduce or increase the minimum protection required for a previously hazard-assessed user premise following a hazard reassessment as described in CCCPH Chapter 3, section 3.2.1.

1. Sewage handling facilities
2. Wastewater lift stations and pumping stations
3. Wastewater treatment processes, handling, or pumping equipment that is interconnected to a piping system connected to a PWS (+)
4. Petroleum processing or storage plants
5. Radioactive material storage, processing plants or nuclear reactors
6. Mortuaries
7. Cemeteries
8. Sites with an auxiliary water supply interconnected with PWS (+)
9. Sites with an auxiliary water supply not interconnected with PWS
10. Premises with more than one connection to the PWS (++++)
11. Recycled water (++)(+++)
12. Recycled water interconnected to piping system that contains water received from a PWS (+)
13. Graywater systems, as defined in California Water Code Section 14876, that are interconnected to a piping system that is connected to a PWS
14. Medical facilities
15. Kidney dialysis facilities
16. Dental office with water-connected equipment
17. Veterinarian facilities
18. Chemical plants
19. Laboratories
20. Biotech facilities
21. Electronics manufacturing
22. Dry cleaner facilities
23. Industrial or commercial laundry facilities
24. Metal-plating facilities
25. Business Park with a single meter serving multiple businesses
26. Marine-port facilities

27. Car wash facilities
28. Mobile home park, RV park, or campgrounds with RV hookups
29. Hotels/motels
30. Gas stations
31. Fire stations
32. Solid waste disposal facilities
33. Pet groomers
34. Agricultural premises
35. Hazard assessment access denied or restricted
36. Railroad maintenance facilities
37. Incarceration facilities (e.g. prisons)
38. Temporary connections to fire hydrants for miscellaneous uses, including construction
39. Private water distribution mains
40. Drinking water storage tank overflow connected to a sump or storm drain (+)
41. Airports

(+) Premise isolated by air gap only except as allowed through CCCPH Section 3.2.2(c)

(++) Dual-plumbed use areas established per CCR Title 22, Section 60313 through 60316.

(+++) Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to CCR Title 22, sections 60313 through 60316 shall use, at a minimum, a DC. If the water supplier is also the supplier of the recycled water, then the recycled water supplier may obtain approval of the local public water supplier or the State Water Board, to utilize an alternative backflow protection plan that includes an annual inspection of both the recycled water and potable water systems and an annual cross-connection test of the recycled water and potable water systems pursuant to subsection 60316(a) in lieu of any BPA.

(++++) All connections must receive at least the same level of protection excluding fire protection when connected to the PWS distribution system (e.g. if one connection requires an RP then all connections must have RPs installed).

Appendix J

Hazard Assessment Form

Hazard Assessment Matrix **Date**.....

HAZARD ASSESSMENT: Initial: Yes or No **Follow up:** Account Change/ New Connection / Change Activities or Materials/ Incident/ No Longer Accurate/Periodic/SWRCB Request

Site Address: .....

Site Contact: .....

APN: ..... Water Account Number: .....

Premise Type: Residential ..... Commercial..... Industrial.....

Water Service Type	Number of Services	Service size	Existing Backflow Protection	Existing protection approved Yes or No	Recommended corrective action if needed
Domestic					
Fire					
Irrigation					

(1) **The existence of cross-connections**; **Yes or No** Explain: .....

-**Current Backflow Protection (Circle One):** AG, RP, DC, Other, None

(2) **The type and use of materials handled and present, or likely to be, on the user premises**; Explain: .....

(3) **The degree of piping system complexity and accessibility**; (Check One)

Simple System..... Multi Piping System..... Low Complexity.....High Complexity.....

-is a "User Supervisor" required for this premise? **Yes or No** Do you recommend that one needs to be appointed? **Yes or No**

(4) **Access to auxiliary water supplies, pumping systems, or pressure systems**;

Auxiliary Water System: **Yes or No** Pumping System: **Yes or No** Pressure System: **Yes or No**

(5) **Distribution system conditions that increase the likelihood of a backflow event (e.g., hydraulic gradient differences impacted by main breaks and high-water demand situations, multiple service connections that may result in flow-through conditions, etc.);** Hydraulic Grade Line: **Yes or No** High-Water Demand: **Yes or No** Looped Systems: **Yes or No**

(6) **User premises accessibility;** Open Access: **Yes or No** Restricted: **Yes or No** Critical Water User: **Yes or No**

(7) **Any previous backflow incidents on the user premises; Yes or No**

If yes, explain: .....

(8) **Degree of Hazzard: High Hazard** (Contaminants or Health hazard. See Appendix D for a list): **Yes or No**

Low Hazard (Pollutants or Non-health Hazards): **Yes or No** **No Hazard: Yes or No**

Have all hazard been properly Identified Yes or No

I certify that all the information presented in this hazard assessment is true and accurate to the best of my knowledge and belief

Signed.....**Date**.....

Specialist Review Name: .....

Corresponding Backflow Protection (Circle One): AG RP DC Other None

Notes:

Appendix K

Backflow Inventory

Humboldt Community Services District

Dedicated to providing high quality, cost effective water and sewer service for our customers

AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **F.3**

TITLE: Consideration of Adopting the District's 2025 Annual Water Supply and Demand Report for the Department of Water Resources (DWR)

PRESENTED BY: Terrence Williams, General Manager

Recommendation:
Discussion followed by a motion to approve and adopt the 2025 Water Supply and Demand Report

Summary:
In 2018, the California Legislature enacted new requirements for urban water suppliers to increase drought resilience and improve communication of water shortage response actions. Each urban water supplier is required to prepare an Annual Water Supply and Demand Assessment (Annual Assessment) and submit an Annual Water Shortage Assessment Report (Annual Shortage Report) to DWR on or before July 1 of each year.

This Board packet includes the Draft Humboldt Community Services District 2025 Annual Water Supply and Demand Assessment Report. If approved, the report will be submitted to the DWR before July 1, 2025. Please approve and adopt this report so that it may be finalized and submitted to the DWR before the July 1 deadline.

Fiscal Impact:
None.

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Humboldt Community Services District

2025 Annual

Water Supply and Demand

Assessment Report

Prepared for the California Department of Water Resources

By Humboldt Community Services District Staff

DRAFT, Scheduled for Adoption

~~Adopted~~ June 24, 2025

EXECUTIVE SUMMARY

The Humboldt Community Services District is not currently experiencing a water shortage. The projected demand over the assessment period, July 1, 2025 through June 30, 2026, is 1,867 Acre Feet (AF) based on the average demand for the previous four years. The projected supply available to the District for distribution is 5,974 AF with 3,901 AF available from the Humboldt Bay Municipal Water District (HBMWD), 1,343 AF available from City of Eureka (CoE) and 730 AF available from District owned groundwater wells drawing from the Eureka Plain Basin. The District is projecting a 220% surplus of supply over projected water demand for the 2024-25 water year. Recharge to the Eureka Plain Basin is estimated at 26,180 Acre Feet per Year (AFY), while documented withdraws are on the order of 6,100 AFY. This results in a surplus recharge of 20,080 AFY. The District is considering developing additional groundwater resources to provide regional water supply resilience and additional capacity for future population growth.

CONTENTS

INTRODUCTION

California Water Code (CWC) states that on or before July 1, 2022, and every year after, each Urban Water Supplier shall prepare an annual assessment of supply and demand and submit an Annual Shortage Report to Department of Water Resources (DWR). The Annual Shortage Report is due by July 1 of every year, as required by Water Code Section 10632.1. Table 1 includes general information about the Humboldt Community Services District Annual Assessment.

Table 1. Annual Assessment Information	
Type of Supplier (Required to check one or two)	
Supplier is a Wholesaler	☐
Supplier is a Retailer	☑
If you are both a wholesaler and retailer, will you be submitting two separate reports or a combined report?	Number of Reports
Year Covered By This Shortage Report (Required)	
Start: July 1,	2025
End: June 30,	2026
Volume Unit for Reported Supply and Demand: *(Must use the same unit throughout)*	AF
Supplier's Annual Assessment Planning Cycle (Required)	
Start Month:	July
End Month:	June
Data Interval:	Monthly (12 data points per year)
Water Supplier's Contact Information (Required)	
Water Supplier's Name:	Humboldt Community Services District
Contact Name:	Terrence Williams
Contact Title:	General Manager
Street Address:	5055 Walnut Drive
ZIP Code:	95503
Phone Number:	(707)443-4550
Email Address:	twilliams@humboldtcsd.org
Report Preparer's Contact Information *(if different from above)*	
Preparer's Organization Name:	NA
Preparer's Contact Name:	
Phone Number:	(XXX)XXX-XXXX
Email Address:	
Supplier's Water Shortage Contingency Plan	
WSCP Title	Humboldt Community Services District Water Shortage Contingency I
WSCP Adoption Date	6/22/2021
Other Annual Assessment Related Activities	
Activity	**Timeline/ Outcomes / Links / Notes**
Annual Assessment/ Shortage Report Title:	Humboldt Community Services District Annual Water Supply and Demand Assessment 2024
Annual Assessment / Shortage Report Approval Date:	6/24/2025

The Annual Assessment and associated Annual Shortage Report are to be conducted based on the Supplier's procedures detailed in its adopted Water Shortage Contingency Plan (WSCP). In preparing for each year's Annual Assessment, Suppliers should reference and follow their procedures, which they have developed as part of the most recently adopted WSCP.

CWC states that on or before September 30, 2022, and every year after, DWR shall prepare a summary report to the State Water Resources Control Board on DWR's review of the submitted Annual Assessment results. The DWR report will include water shortage information at the Supplier level, as well as regional and statewide analysis of water conditions. The report will also include information on water shortage response actions taken by Suppliers as a result of their Annual Assessments.

The Humboldt Community Services District (HCSD, District) does not rely on water imported from the State Water Project or the Bureau of Reclamation and is not currently experiencing a water shortage. This report titled Humboldt Community Services District 2025 Annual Water Supply and Demand Assessment Report satisfies the reporting requirements of the "Annual Shortage Report" but is not titled that way because the District is not experiencing a shortage.

BACKGROUND

The Humboldt Community Services District (District or HCSD) was formed in 1952 to provide water and wastewater services to the unincorporated areas of Eureka, CA. Since that time, the District has expanded the service area to include Myrtletown, Pine Hill, Humboldt Hill, Fields Landing, King Salmon, and Freshwater. Expansion was accomplished both by District construction of facilities, such as in Myrtletown and Cutten, and by acquisition of existing facilities such as the Pialorsi water system in Humboldt Hill and the County Service Area No. 3 in King Salmon and Fields Landing.

The District currently supplies drinking water to a population of 19,802. The annual water demand by District ratepayers is currently about 2,000 acre-feet/year (AFY). This is less than 100 gallons per capita per day (GPCPD) including residential, commercial, institutional and agricultural/irrigation uses.

WATER

The District's water distribution and storage system is complex, consisting of twenty-two (22) different pressure zones, ten (10) water storage tanks containing 5.0 million gallons of storage capacity, and twelve (12) water booster pumping stations. The system covers 15 square miles of hilly terrain.

Sources

Water supply is furnished by three sources. Approximately one half of the District's consumption is purchased/imported directly from the Humboldt Bay Municipal Water District (HBMWD) through the Truesdale booster pump station; one quarter is purchased from the City of Eureka (CoE), who purchases it from HBMWD through the Hubbard and Harris booster pump station; the final quarter is pumped from District owned wells located in the Humboldt Hill area that draw off of the Eureka Plain Groundwater Basin near the Elk River.

These three water sources supply the three major service areas of the District. Hubbard and Harris pump station (water purchased from CoE) supplies the northern area of Myrtletown, Mitchell Road, Freshwater and Pigeon Point (Freshwater/Mitchell Road Zone). Truesdale pump station (water purchased from HBMWD) supplies the central areas of Cutten, Rosewood, Pine Hill, Ridgewood and Elk River (Ridgewood Zone). District well water supplies the southern area of Humboldt Hill, King Salmon, Fields Landing and College of the Redwoods (Humboldt Hill Zone).

Water can be moved between these zones through transmission lines and interties. Doing so requires additional pumping and so it is inefficient and less cost effective.

Demands

The District monitors and records the volume of water purchased/imported from HBMWD and CoE as well as the volume of water pumped from groundwater wells each month. This data is used for the monthly former Drinking Water Information Clearinghouse (DRINC) and current Safe and Affordable Funding for Equity and Resilience (SAFER) reporting and annual Electronic Annual Report (eAR) reporting to the State Water Resources Control Board. Four years of this data was used to develop the projected water demand for the 2025 Annual Assessment. Monthly data over the most recent four-year period was averaged to define the unconstrained monthly demand. This produces a conservative estimate of demand because, over the past four years, demand has been trending down. The total volume of water produced during the 12 months preceding the assessment period (1,832 AF) is 5% less than for the 12-month period from four years prior (1,916 AF). Table 2 summarizes the projected monthly water demands of the District.

Table 2: Water Demands[1]														
Use Type			Start Year:	2025		Volumetric Unit Used[2]:	AF							
Drop-down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool (Add additional rows as needed)	Additional Description (as needed)	Level of Treatment for Non-Potable Supplies **Drop-down list**	Projected Water Demands - Volume[3]											
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total by Water Demand Type
Demands Served by Potable Supplies														
All Demands			182	184	165	152	155	143	148	136	148	146	141	167	1867
Total by Month (Potable)			182	184	165	152	155	143	148	136	148	146	141	167	1867
Demands Served by Non-Potable Supplies														
Total by Month (Non-Potable)			0	0	0	0	0	0	0	0	0	0	0	0	0
Notes: List considered factors impacting demands														

[1]Projections are based on best available data at time of submitting the report and actual demand volumes could be different due to many factors.
[2]Units of measure (AF, CCF, MG) must remain consistent.
[3]When opting to provide other than monthly volumes (bi-monthly, quarterly, or annual), please see directions on entering data for Projected Water Demand in the Table Instructions.

Supplies

The District purchases/imports water from two agencies, HBMWD and CoE; and pumps groundwater through District owned wells. The water purchased from HBMWD and CoE is sourced from an aquifer below the Mad/Baduwa't River through Ranney Collectors owned and operated by HBMWD. Through contracts, HCSD is allocated 2.9 million-gallons per day (MGD) from HBMWD directly and an additional 1 MGD from CoE which is sourced from HBMWD. On average, the District sources 0.45 MGD from groundwater with a peak month average daily demand of 0.64 MGD.

Humboldt Bay Municipal Water District

HBMWD pumps groundwater from an aquifer below the Mad River north of Arcata CA. HBMWD supplies water to seven municipal customers including City of Arcata, City of Blue Lake, City of Eureka, Fieldbrook CSD, Humboldt CSD, Manila CSD, and McKinleyville CSD and approximately 600 retail water customers. HBMWD has the capacity to supply 20 MGD of treated drinking water. The daily allocation of water to the seven municipal customers totals 17 MGD and includes 2.9 MGD to HCSD.

HBMWD delivers water to HCSD through a 15-mile-long transmission line that runs down the Samoa Peninsula and crosses Humboldt Bay and terminates at the HCSD pumping facility at 1930 Truesdale Street in Eureka, CA. HBMWD water is then pumped another 4.5-miles to the HCSD storage tanks at the District corporation yard at 5055 Walnut Drive in Cutten, CA.

HBMWD maintains their own Urban Water Management Plan and associated WSCP that can be referenced at the following web location (https://www.hbmwd.com/files/03d84a5c2/UWMP-2020+final.pdf). HBMWD's WSCP indicates that they will use the Ruth Lake Reservoir storage volume and the time of year to determine their shortage stage. On June 8, 2025 HBMWD Ruth Lake Reservoir was at 99% of capacity. This corresponds to a shortage action level of Stage 1, no shortage (HBMWD lists action Stages 1-5, HBMWD Stage 1 corresponds to Annual Water Supply and Demand Assessment (AWSDA) Shortage Level 0, no shortage).

Based on this information, HCSD can access 2.9 MGD from HBMWD through the Truesdale Pumping Station. 2.9 MGD corresponds to 3901.1 AFY. HCSD's total annual demand is about 2000 AFY.

City of Eureka

HCSD purchases/imports water from CoE. CoE is one of HBMWD's municipal customers with a 7 MGD allocation. That allocation is delivered to CoE through a City owned transmission line that originates at the HBMWD turbidity reduction facility in Essex, CA and terminates at the City's primary storage reservoir 13.5-miles away. The transmission line passes a City/District owned pumping station at the corner of Hubbard Lane and Harris Street in Eureka CA (Hubbard Lane pumping Station). The Hubbard Lane Pumping Station taps into the City's transmission line one mile upstream from the City's reservoir. Through contract, the District can access up to 1 MGD of the City's water allocation through this pumping station. As described previously, HBMWD is at AWSDA Shortage Level 0, no shortage so HCSD can access 1 MGD through the Hubbard Lane pumping station. 1 MGD corresponds to 1343.2 AFY.

Groundwater Basin

The District maintains two active well sites at the base of Humboldt Hill, near the Elk River. Over the past four years, the District wells have supplied an average of 0.45 MGD with a peak month average daily pumping of 0.64 MGD. This translates to 42.3 acre-feet per month average and 60 acre-feet per

month peak. These units were used to establish the peak month volume for groundwater withdrawal. Extending the peak month withdrawal over 12 months results in 730 AFY.

The District's groundwater is drawn from the Eureka Plain Basin (DWR Groundwater Basin Number 1-9). This basin covers 37,400 acres and is bounded by the Little Salmon fault to the south, the Freshwater Fault to the north, Wildcat Series deposits to the east and Humboldt Bay to the west. Precipitation infiltration and seepage from Freshwater Creek, Elk River and Eel River contribute to recharge of the Eureka Plain Basin (DWR 2020).

The California Department of Water Resources (DWR) performed an extraction survey of the Eureka Plain Basin in 1996 and determined that agricultural and municipal/industrial extraction are 4,800 and 1,300 AFY respectively (DWR 2020). HCSD has been pumping from wells in the Eureka Plain Basin since the 1950's so those extraction volumes were captured in that survey.

The Eureka Plain Basin has not been identified as an impaired basin so extensive studies regarding recharge and storage have not been developed. The adjacent Eel River Valley Groundwater Basin has been thoroughly studied and has hydrologic similarities to the Eureka Plain Basin including precipitation, soil formations, surface topography, ocean boundary and year-round surface water flow. The Eel River Valley Groundwater Sustainability Plan was adopted on January 29, 2022 by the Humboldt County Board of Supervisors (Humboldt County 2022). Based on data from the Eel River Valley Groundwater Sustainability Plan, the authors assume that on average, 21% of precipitation infiltrates into the Eel River Valley Groundwater Basin.

Considering the hydrologic similarity and proximity of the two basins, the assumption that 21% of annual precipitation infiltrates into the Eureka Plain Basin will be used for the purposes of this report. Using an annual average of 38.5 inches of precipitation and a surface area of 37,400 acres and the assumed 21% infiltration rate implies that 25,198 AFY percolates into the basin and becomes groundwater. This is a conservative estimate of recharge because seepage from the rivers is not accounted for. The Eel River Valley Groundwater Sustainability Plan indicates that river to groundwater seepage is the largest contributor to recharge.

Assuming that pumping from the Eureka Plain Basin has not increased significantly since the 1996 survey (6,100 AFY) and that recharge to the basin is at least 25,198 AFY, there is substantial groundwater resources available to be developed; at least 19,098 AFY on average.

District Wells

The District adopted the 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) on June 22, 2021. Section 3.2 of the District's WSCP describes a process by which the District will evaluate the capacity of the Eureka Plain Basin to sustain extraction at the levels planned by the District for the Annual Assessment. Section 3.2 of the District's WSCP is included for reference below:

> ***3.2 Data and Methodologies***
>
> *HCSD will prepare Annual Water Supply and Demand Assessments utilizing the following data:*
>
> • *Precipitation data from Eureka*
>
> • *Groundwater elevation data from CASGEM wells within the Eureka Plain Groundwater Basin.*

- *Projected current year unconstrained demand.*
- *Projected current year available supply.*
- *HBMWD Annual Water Supply and Assessment*

The above data will be evaluated with similar methodologies and added to the analysis of water supply reliability contained in Section 2 of this plan.

Section 2 of the District's WSCP describes the process for determining the overall, long-term reliability of the District's groundwater resources. The data used for this analysis is available from the California Statewide Groundwater Elevation Monitoring (CASGEM) online system.

That analysis includes water surface elevation data for two residential water wells that have significant historical data. The wells are not District owned and were selected because they are located in the upper portion of the Eureka Plain Basin so their water surface levels would be susceptible to variation based on precipitation recharge or lack thereof. Despite the extended historical data for these two wells, recent water surface elevation data is spotty or not available at all. The reason for the lack of data cited by CASGEM is that residential wells were not monitored during the COVID emergency.

The CASGEM residential wells used to analyze groundwater reliability are the Clover Well at 40.7221, -124.1867 (CASGEM ID 04n01w21b001h) and the Windmill Well at 40.7581, -124.0639 (CASGEM ID 04n01e03m001h). The Clover Well has a ground surface elevation of 83 feet above mean sea level and the Windmill Well has a ground surface elevation of 73 feet above mean sea level. These wells were named by District staff based on the Humboldt County road names at their respective locations. Note: According to CASGEM, the Windmill Well was destroyed in 2017 and no further data will be available from that location.

The District has decided to correlate data from the CASGEM database to data collected from District owned wells and make the Annual Assessment based on current data collected from District owned wells.

The District currently maintains two active production wells that draw from the Eureka Plain Basin. These are the Spruce Point Well located at 40.7433, -124.1993 (CA1210009_006_006) and the South Bay Well located at 40.7369, -124.2086 (CA1210009_013_013). The District is also in the process of abandoning/destroying a third production well whose casing recently failed; the Princeton Well is located at 40.7361, -124.2037 (CA1210009-007). District staff have been closely monitoring the water surface elevation of these wells twice annually since 2022. Current water surface elevation measurements were taken in the spring of 2025. Some historic data is also available for these wells.

The Princeton Well was constructed in June, 1978 and has a ground surface elevation of 14 feet above mean sea level. Precise measurements for historic water surface elevation are limited for this location. Operator notes indicate that this well continuously produced artesian flow from 1988 to present. This data indicates that the water surface elevation was greater than 14 feet above mean sea level. A precise measurement of the water surface elevation was recorded for the Princeton Well in 2022, 2023 and 2024 using a flexible clear tube connected to the well's bypass plumbing while there was artesian flow from the well. The water surface elevation recorded on April 10, 2025 was 14.33 feet above mean sea level.

The South Bay Well was constructed in August, 2018 and has a ground surface elevation of 10 feet above mean sea level. Operator notes indicate that this well continuously produced artesian flow from 2018 to present. This data indicates that the water surface elevation is greater than 10 feet above mean sea level. A precise measurement of the water surface elevation was recorded for the South Bay Well in 2022, 2023 and 2024 using a flexible clear tube connected to the well's bypass plumbing while there was artesian flow from the well. The water surface elevation recorded on April 10, 2025 was 15.47 feet above mean sea level.

The District maintained a second well on the same parcel as the South Bay Well that was destroyed in June of 2018 (CA1210009-004). This well was constructed in August, 1988. Operator notes indicate that this well continuously produced artesian flow between 1988 and 2014. This well was taken out of service and operator records ceased due to deteriorating water quality. The water quality issues were determined to be due to surface interaction because of a failed well seal. The artesian flow data indicates that the water surface elevation was greater than 10 feet above mean sea level between 1988 and 2014.

The Spruce Point Well was constructed on July 11, 1988 and has a ground surface elevation of 35 feet above mean sea level. The District does have some water surface elevation data for this well. In July of 1988, the water surface elevation was 15.5 feet above mean sea level. On April 19, 2012, the water surface elevation was 17.5 feet above mean sea level. On May 16, 2023, the water surface elevation was 15 feet above mean sea level. Additionally, water surface elevation has been recorded in 2022, 2023 and 2024. On April 10, 2025 the water surface elevation in the Spruce Point Well was 14.67 feet above mean sea level.

Figure 1 summarizes the available data for the Eureka Plain Basin between 1985 and 2025. The data includes measured water surface as obtained from the CASGEM online system for spring and fall recordings for the Windmill Well and Clover Well. Also included is measured water surface elevation data for the District's Spruce Point Well. Additionally, estimated and measured data is shown for the District's South Bay and Princeton Wells (ground surface elevation of 10 feet and 14 feet respectively were used to quantify operator notes indicating that the wells showed artesian flow). Precipitation data is also shown as recorded on the NOAA website. This data is shown as water year (October through September) and as calendar year. Finally, the driest year is indicated with a vertical red line (2013) and the driest five-year period is indicated with a vertical red field (1987 to 1992).

Based on water surface elevation measurements taken between 1985 and 2025, there have been no appreciable changes in water depth. Groundwater elevations in the wells are consistent and have not been significantly influenced by climatic variation (precipitation). Based on this information, the water produced from the HCSD groundwater wells is very reliable and not susceptible to drought conditions.

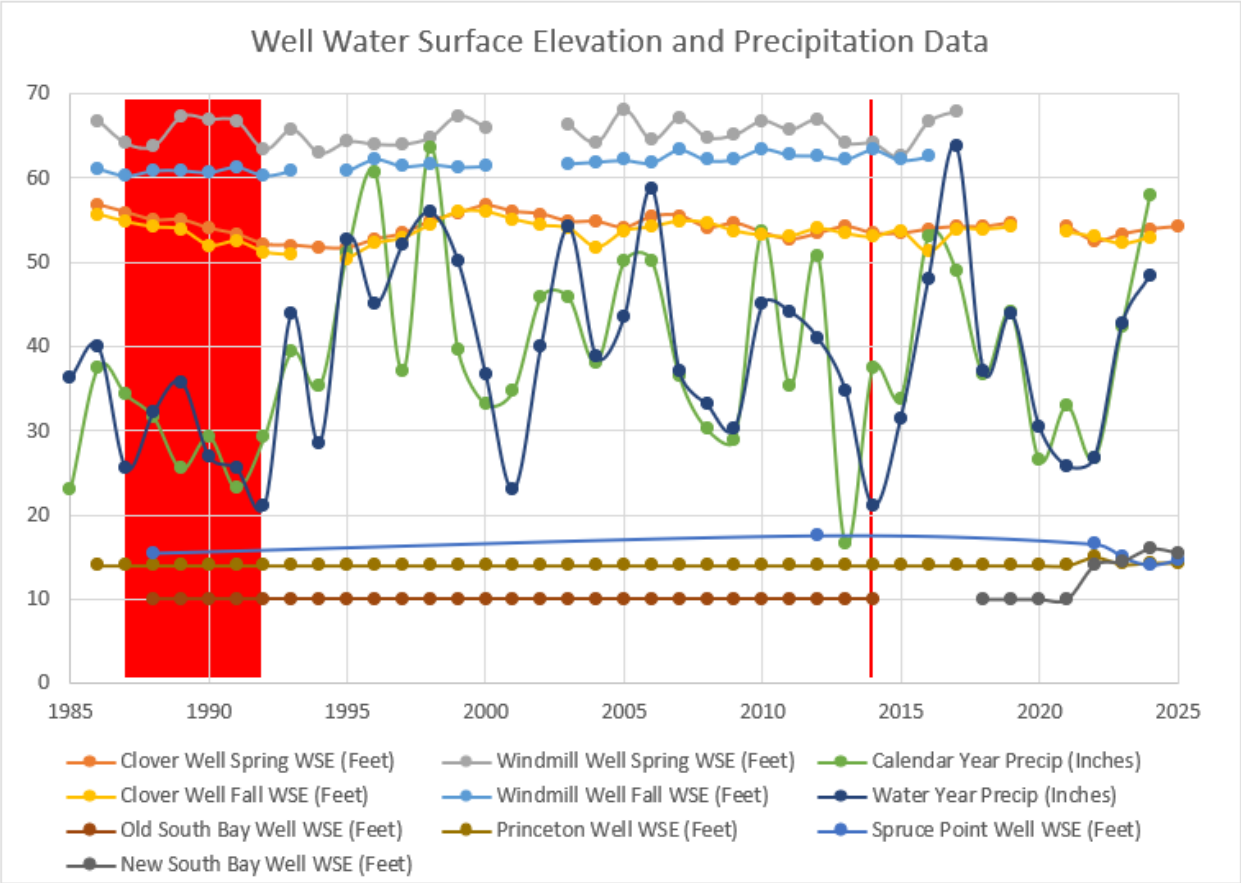

Figure 1: Water surface elevation and precipitation data for the Eureka Plain Basin between 1985 and 2024

Figure 2 shows an area map that includes a portion of the Eureka Plain Basin. The map was originally published in a document titled "Groundwater Conditions in the Eureka Area, Humboldt County, California, 1975" published by the US Geological Survey and developed in cooperation with the Humboldt County Department of Public Works (USGS, 1975). The approximate locations of the District's production and monitoring wells are shown and called out (South Bay, Princeton, Spruce Point, Clover, and Windmill). The purpose of this figure is to corroborate the water surface elevations recorded for the period between 1985 and 2025 and shown in Figure 1. Figure 2 shows water surface elevation contours in the vicinity of the City of Eureka at the edge of Humboldt Bay as measured in 1975 with similar values to what was measured between 1985 and 2025 in the District's production wells nearby.

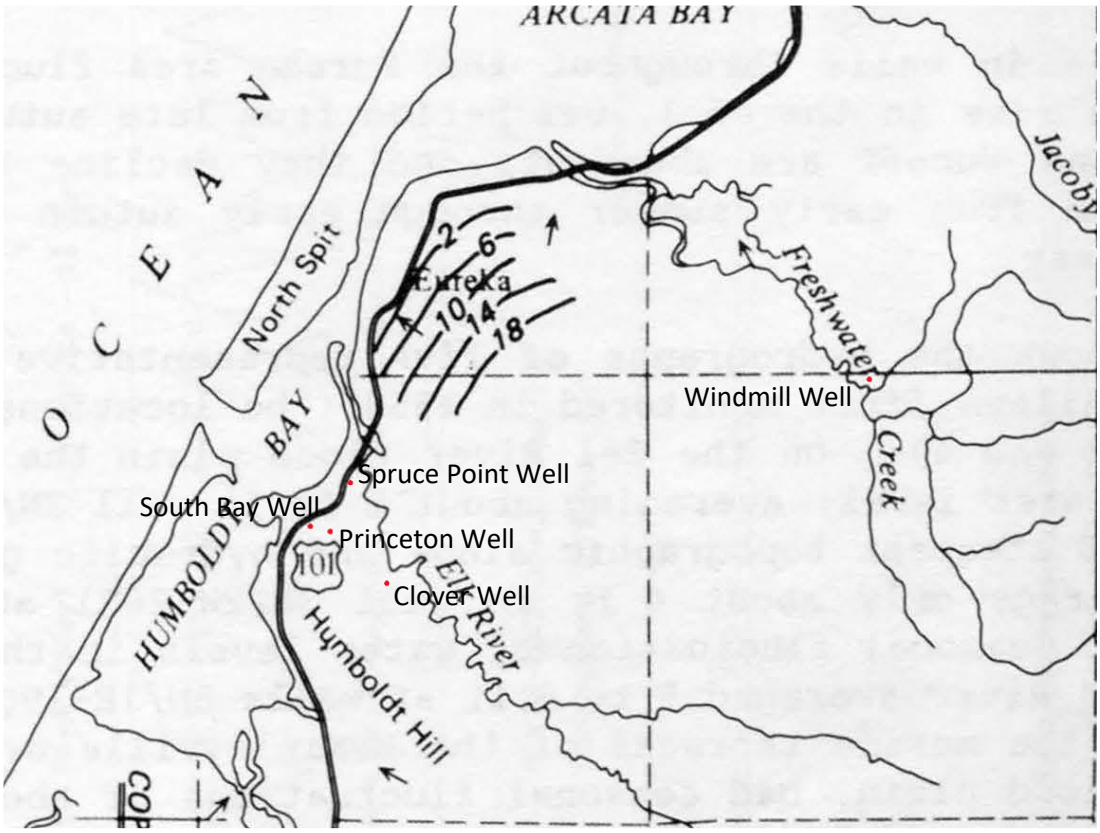

Figure 2: Clipped image of a map taken from "Groundwater Conditions in the Eureka Area, Humboldt County, California, 1975" Includes approximate locations of District production wells and local CASGEM monioring wells (USGS, 1975).

Supply Summary

During the assessment period, July 1, 2025 through June 30, 2026, the District can access 5244 AF though purchase/import from HBMWD and CoE. The District can also pump 730 AF from groundwater wells in the Eureka Plain Basin. The total water available to the District for the assessment period is 5974 AF. Table 3 summarizes water supplies available to the District during the assessment period.

Table 3: Water Supplies[1]

Water Supply		Start Year:	2025		Volumetric Unit Used[2]:	AF									
Drop-down List May use each category multiple times.These are the only water supply categories that will be recognized by the WUEdata online submittal tool (Add additional rows as needed)	Additional Detail on Water Supply	Projected Water Supplies - Volume[3]												Water Quality	Total Right or Safe Yield* (optional)
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total by Water Supply Type	Drop-down List	
Potable Supplies																
Purchased/Imported Water	HBMWD	331.33	331.33	320.64	331.33	320.64	331.33	331.33	299.26	331.33	320.64	331.33	320.64	3901.13		
Purchased/Imported Water	CoE	114.08	114.08	110.4	114.08	110.4	114.08	114.08	103.04	114.08	110.4	114.08	110.4	1343.2		
Groundwater (not desal.)	HCSD	62	62	60	62	60	62	62	56	62	60	62	60	730		
Total by Month (Potable)		507.41	507.41	491.04	507.41	491.04	507.41	507.41	458.3	507.41	491.04	507.41	491.04	5974.33		0
Non-Potable Supplies																
Total by Month (Non-Potable)		0	0	0	0	0	0	0	0	0	0	0	0	0		0

RESULTS AND CONCLUSIONS

Water supply available to the District far exceeds expected demands for the 2025-26 water supply and demand assessment period. Table 4P shows the District's potable water shortage assessment summary for 2025. The projected monthly surplus of potable water available to the District for distribution ranges from 176% in August 2025 to 255% in December 2025. Over the 12-month assessment period, the District projects 220% potable water surplus. The District does not supply non-potable water as reflected in Table 4NP (below Table 4P).

Table 4(P): Potable Water Shortage Assessment[1]	Start Year: 2025					Volumetric Unit Used[2]:					AF		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun[3]	Total
Anticipated Unconstrained Demand	182.0	184.0	165.0	152.0	155.0	143.0	148.0	136.0	148.0	146.0	141.0	167.0	1867.00
Anticipated Total Water Supply	507.4	507.4	491.0	507.4	491.0	507.4	507.4	458.3	507.4	491.0	507.4	491.0	5974.33
Surplus/Shortage w/o WSCP Action	325.4	323.4	326.0	355.4	336.0	364.4	359.4	322.3	359.4	345.0	366.4	324.0	4,107.3
% Surplus/Shortage w/o WSCP Action	179%	176%	198%	234%	217%	255%	243%	237%	243%	236%	260%	194%	220%
State Standard Shortage Level	0	0	0	0	0	0	0	0	0	0	0	0	0
Planned WSCP Actions[4]													
Benefit from WSCP: Supply Augmentation													0.0
Benefit from WSCP: Demand Reduction													0.0
Revised Surplus/Shortage with WSCP	325.4	323.4	326.0	355.4	336.0	364.4	359.4	322.3	359.4	345.0	366.4	324.0	4107.3
% Revised Surplus/Shortage with WSCP	179%	176%	198%	234%	217%	255%	243%	237%	243%	236%	260%	194%	220%

Table 4(NP): Non-Potable Water Shortage Assessment[1]	Start Year: 2025					Volumetric Unit Used[2]:						AF	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun[3]	Total
Anticipated Unconstrained Demand: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Anticipated Total Water Supply: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus/Shortage w/o WSCP Action: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Surplus/Shortage w/o WSCP Action: Non-Potable													
Planned WSCP Actions[4]													
Benefit from WSCP: Supply Augmentation													0.0
Benefit from WSCP: Demand Reduction													0.0
Revised Surplus/Shortage with WSCP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Revised Surplus/Shortage with WSCP													

Planned Action

Table 5 summarizes the District's planned conservation efforts (Planned Water Shortage Response Actions). The District maintains a rebate program for rainwater catchment. The program is intended to encourage landscape irrigation efficiency through rainwater catchment and storage.

Table 5: Planned Water Shortage Response Actions			July 1, 2025		to June 30, 2026	
Anticipated Shortage Level Drop-down List of **State Standard Levels** (1 - 6) and Level 0 (No Shortage)	**ACTIONS[1]: Demand Reduction, Supply Augmentation, and Other Actions. (Drop-down List)** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	Is action already being implemented ? **(Y/N)**	How much is action going to reduce the shortage gap? **(Optional)**		When is shortage response action anticipated to be implemented[2]?	
			Enter Amount	*(Drop-down List) Select % or Volume Unit*	*Start Month*	*End Month*
Add additional rows as needed						
0 (No Shortage)	Provide Rebates for Landscape Irrigation Efficiency	Yes	0	AF	July	June
NOTES: Notes Section to be used only for clarifying details, and not for listing specific actions. Actions must be entred into table rows above.						

Continued Monitoring

The District's record of groundwater surface elevation data is less than optimal. The reason for this is the abundance of available groundwater. In 73 years of operation, the District has never experienced a water shortage. The District has plans to monitor water surface elevation at all of the production well sites as often as is practical going forward. Since 2022, the District has been recording two water surface elevation measurements each year (spring and fall) for each of the three groundwater wells (South Bay, Spruce Point and Princeton).

Each of the District's production wells include unique challenges. The new South Bay Well will be the easiest to monitor because a data acquisition solution is possible at that location. A pressure transducer has been installed into the South Bay Well that enables the District's SCADA system to record level data continuously. This will allow District staff to monitor static water level, drawdown and recovery rates.

The Princeton well has been taken out of service because of a failed casing. This well is scheduled to be destroyed. A level measurement will be taken at the Princeton Well using the clear stand tube method twice annually until that well is destroyed.

The Spruce Point Well has presented a challenge for regular water surface elevation measurements. The water surface elevation in this well is usually around 20 feet below the ground surface. The well casing has been lined with a smaller diameter stand pipe. The drop pipe outer diameter to well casing inner diameter is tight enough that a well tape cannot be fed into the annular space. In 2022, the Spruce Point Well pump was pulled so that the well could be filmed and a water surface elevation measurement was taken. In 2023, District staff was able to develop a method to make a manual measurement of the water surface elevation without pulling the pump by disassembling the discharge plumbing and feeding a well tape down the discharge pipe in the annular space between the pump drive shaft and the discharge pipe. In 2025, the District replaced the Spruce Point pump with a submersible unit with a smaller discharge pipe. At that time, a sensor was installed that will be integrated into the District's SCADA system to take automated water surface elevation measurements at the Spruce Point Well.

Additional Source Development

Considering the abundance of groundwater in the Eureka Plain Basin, the District plans to develop groundwater resources to augment supply and bolster resiliency. This will provide water security for the District as well as providing a reliable, high-quality source of drinking water for future population growth in the region. Developing the District's groundwater resources will also enable the District to provide water to neighboring agencies, like the CoE, in the event of an emergency such as a transmission line failure. The transmission line supplying HBMWD water to HCSD is 15 miles long. The transmission line supplying HBMWD water to CoE is about 13.5 miles long. Both of these lines are susceptible to seismic damage. Local storage and/or supplemental supply will greatly reduce the risk of water outage for both agencies.

The District owns six parcels where wells drawing from the Eureka Plain Basin have served the District in the past. These include the South Bay, Princeton and Spruce Point locations. Additionally, there were production wells on three other District owned properties in the past. These are the Little California Well (40.7658, -124.1713), Meyers Well (40.7592, -124.1778), and Youngers/Pine Hill Well (40.7526, -124.1881).

As previously indicated, the Princeton Well casing has failed and the well is scheduled for destruction. Wells on this parcel have served the District for many years. The current well on that site had a pumping capacity of 100 gallons per minute (GPM). The District is considering developing a production well at that location with similar capacity to the South Bay Well (1,000 to 1,500 GPM).

The Spruce Point well was constructed almost 35 years ago. This well is likely nearing the end of its useful life. A new well will be developed at this location when the current well fails.

The South Bay Well was constructed in 2018 and is currently serving the District reliably.

The District will perform feasibility studies to determine the potential to develop groundwater wells on the other historical District well sites. The expectation is that each of these sites are suitable for wells with similar pumping capacity as the South Bay Well. Provided all six sites are able to support 1,000 GPM well pumps and that interactions between the wells do not affect production, the District would have access to about 5,000 AFY of groundwater at a 50% duty cycle. Considering that a conservative estimate of surplus groundwater recharge into the basin is 19,098 AFY and that the District's current annual demand is 2,000 AFY, this level of development would be suitable to supply regional water resiliency and future growth.

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Humboldt Community Services District

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AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **F.4**

TITLE: Consideration of Changing Existing Monthly Gym Membership Reimbursement to an Annual Wellness Benefit

PRESENTED BY: Terrence Williams, General Manager

Recommendation:

Staff recommends that the Board approve expanding the existing monthly gym membership reimbursement benefit of $20 to a Wellness Benefit of $240 annually per employee.

Summary:
In Fiscal Year 2014, the District and the Employee Association negotiated a health club membership reimbursement of $20 per month (equivalent to $240 annually) for all District employees. Since its implementation, only 2–3 employees per year have taken advantage of this benefit, which is limited strictly to gym memberships.

In 2024, the District received a one-time Wellness Grant from ACWA JPIA, allowing employees to receive up to $40 for wellness-related purchases. During this period, fifteen employees utilized the program, purchasing items such as running shoes, weight sets, push-up bars, fishing equipment and paying for Ironman race entry fees; to name a few. The increased participation in this program demonstrated broader employee interest in wellness activities beyond gym memberships.

Expanding the current benefit to an annual Wellness Reimbursement of $240 would continue to allow reimbursement for gym memberships, while also allowing for reimbursement of a broader range of wellness-related purchases, such as exercise equipment, fitness trackers, race fees, fishing licenses, gardening supplies, yoga classes or similar health-promoting items.

This change aims to encourage greater employee participation in wellness activities, promote healthier lifestyles, increase employee morale, and align with modern wellness program best practices in the public sector.

Fiscal Impact:

None.

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Humboldt Community Services District

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AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **F.5**

TITLE: Consideration of Canceling the Regular Meeting on July 8, 2025

PRESENTED BY: Terrence Williams, General Manager

Recommendation:
Discuss and determine the necessity of convening a regular meeting of the Board of Directors on July 8, 2025

Summary:
The General Manager will be attending the General Manager Leadership summit the week before the Board meeting, and the District will be closed on Friday, July 4, 2025. Staff have not identified any agenda items for the regular meeting scheduled for July 8, 2025 and therefore recommends canceling the meeting.

If a pressing need arises, the Board President may call a special meeting for that purpose.

Fiscal Impact:

None.

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Humboldt Community Services District

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AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **G.1**

TITLE: Consideration of Adopting Resolution 2025-07: Establishing Appropriation Limits for Fiscal Year 2025/26

Recommendation:

Adopt Resolution 2025-07 establishing the appropriations limit for fiscal year 2025/26

Summary:

Article XIII B of the California Constitution, adopted by Proposition 4 in 1980, and amended in 1990 by Proposition 111, imposes restrictions on the amount of revenues that can be received and appropriated in a fiscal year. Only revenues defined to as "proceeds of taxes" are restricted by the limit. Generally, revenues restricted as to use, such as enterprise fund revenues and charges for services not exceeding the cost of providing the service are not considered proceeds of taxes. Also, certain expenditures are considered exempt from the limit. During any fiscal year, the District may not appropriate any proceeds of taxes they receive in excess of its Limit.

The appropriations limit is based on actual appropriations during the base year of 1978-79, and is adjusted each year using the growth in population and inflation. The limit, cost of living factor, and population change factor must be adopted each year by resolution of the District Board of Directors and incorporated into the District's budget.

Projected property taxes and assessments for 2025/26 total $450,000. All of the District's projected property tax revenues subject to the Appropriations Limit.

The 2025/26 Appropriations Limit, as calculated on the following page, is $ 568,265. Projected tax revenues are $ 118,265 under the appropriations limit for 2025/26.

Fiscal Impact:

None.

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FISCAL YEAR 2025/26 HUMBOLDT COMMUNITY SERVICES DISTRICT APPROPRIATIONS LIMIT CALCULATIONS

A. Prior Year's Limit (FY 2024-25)		$ 552,097
B. Adjustment Factors		
1. Population % (County population growth)[1]		-0.05
2. Inflation % (Change in California Per Capita Personal Income)[2]		2.98
Population Converted to a Ratio:	$\frac{-0.05+100}{100}$ =	0.9995
Per Capita Cost of Living Converted to a Ratio:	$\frac{2.98+100}{100}$ =	1.0298
Calculation of Factor for Fiscal Year 2025-26	0.9995 x 1.0298 =	1.0292851
C. FY 25-26 Limit (Prior Year's Limit X Adjustment Factor)		$ 568,265

APPROPRIATIONS SUBJECT TO LIMIT AND AMOUNT UNDER LEGAL LIMIT

A.	Projected Proceeds of Taxes	$ 450,000
B.	Exclusions	0
C.	Appropriations Subject to Limit	$ 450,000
D.	Current Year Limit	$ 568,265
E.	Under Limit	$ 118,265

[1] Source: California Department of Finance publication E-1 - Population and Housing estimate with annual percentage change – January 1 2024 and 2025

[2] Source: California Department of Finance Consumer Price Index – Fiscal Year Averages - 2025

RESOLUTION NO. 2025-07

A RESOLUTION OF THE HUMBOLDT COMMUNITY SERVICES DISTRICT BOARD OF DIRECTORS ESTABLISHING APPROPRIATIONS LIMIT FOR FISCAL YEAR 2025/2026

WHEREAS, Section 7910 of the Government Code provides that the governing body of each local jurisdiction shall, by resolution, establish its appropriations limit for the following fiscal year pursuant to the provisions of Article XIIIB of the California Constitution at a regularly scheduled meeting or a noticed special meeting; and,

WHEREAS, documentation used in the determination of the appropriations limit for Fiscal Year 2025/26 for the Humboldt Community Services District has been available to the public for fifteen days prior to the date hereof;

NOW, THEREFORE, the Board of Directors of the Humboldt Community Services District finds, determines and resolves that the appropriations limit for the Humboldt Community Services District for fiscal year 2025/2026 (commencing July 1, 2025 and ending June 30, 2026) is hereby established at $568,265.

PASSED, APPROVED, and ADOPTED this 24th day of June 2025, on the following roll call vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Joseph Matteoli, President

ATTEST:

_____
Robert Christensen, Secretary

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Humboldt Community Services District

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AGENDA REPORT

For HCSD Board of Directors Regular Meeting of: June 24, 2025

AGENDA ITEM: **G.2**

TITLE: Consideration of Adopting Fiscal Year 2025/26 Capital Improvement Program Plan (CIP)

PRESENTED BY: Terrence Williams, General Manager

Recommendation:
Discussion followed by a motion to approve Fiscal Year 2025-26 Capital Improvement Plan (CIP).

Summary:

The District uses a five-year Capital Improvement Program/Plan (CIP) to plan, budget and schedule capital investments in infrastructure, vehicles, equipment and buildings. The CIP is updated annually and is used as a planning tool to assist with rate setting, budgeting, cost projections and to prioritize major repairs, rehabilitation, updates and replacement of District owned assets. The FY 2025/26 updated Draft CIP report is included in this Board Packet for your review.

During the June 10, 2025 Board meeting, the updated Draft CIP tables were presented for review, discussion and consideration. Included with this agenda report is the complete CIP report for Fiscal Year 2025/26. The tables and spending are identical to what was presented in May without exception.

Please approve the Fiscal Year 2025/26 CIP report by motion and roll call vote.

Fiscal Impact:

$8.9M for Fiscal Year 2025-26 of which $3.7M is the District's contribution to the City's CIP program.

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Humboldt Community Services District

Fiscal Year 2025/26

Capital Improvement Program

With Details for

Fiscal Year 2025/26 – 2029/30

and Projections out to Fiscal Year 2045/46

DRAFT

Schedule for Adoption June 24, 2025

EXECUTIVE SUMMARY

The Humboldt Community Services District Fiscal Year 2025/26 Capital Improvement Plan (CIP) details the cost and scheduling for the anticipated capital projects and expenditures for the five-year period beginning with Fiscal Year 2025/26 and ending with Fiscal Year 2029/30. The plan also includes less detailed projections for anticipatable expenditures to the ten and twenty-year planning horizon. A table summarizing the capital expenses can be found below (Table 1). The FY 25/26 totals include $2.2M that was budgeted for CIP projects that were planned for FY 24/25 and were not completed. Additionally, the FY 25/26 CIP includes $3.21M allocated to the City of Eureka's Eliminate Bypass Project. Projected spending for capital projects in FY 25/26 is $8.9M. The District continues to apply for grant funding that will offset costs associated with various proposed CIP projects in future years.

Table 1: Summary of Humboldt Community Service District anticipated capital expenses out to the 20-year planning horizon.

	Current FY 24-25	**Scheduled FY 25-26**	Projected FY 26-27	Projected FY 27-28	Projected FY 28-29	Projected FY 29-30	Projected Years 6 to 10*	Projected Years 11 to 20**
		1	2	3	4	5		
Sewer Facilities	$1,458,115	**$4,330,000**	$4,740,500	$1,826,500	$2,305,000	$1,730,000	$12,716,667	$27,433,333
Sewer Mains	$40,736	**$985,500**	$1,262,500	$2,120,100	$2,163,100	$3,295,500	$33,105,506	$55,529,013
Water Facilities	$987,900	**$1,466,800**	$1,415,500	$1,585,500	$2,100,500	$2,060,000	$7,145,000	$15,200,000
Water Mains	$98,760	**$1,478,000**	$898,333	$2,395,000	$1,676,666	$1,015,000	$30,075,000	$80,150,000
Building and Yard	$98,815	**$512,500**	$100,000	$100,000	$100,000	$110,000	$250,000	$500,000
Vehicles and Equipment	$109,509	**$95,000**	$65,000	$100,000	$65,000	$100,000	$2,000,000	$4,000,000
Sewer Total	$1,603,012.8	**$5,619,250.0**	$6,085,500.0	$4,046,600.0	$4,550,600.0	$5,130,500.0	$46,947,172.7	$85,212,346.3
Water Total	$1,190,821.8	**$3,248,550.0**	$2,396,333.0	$4,080,500.0	$3,859,666.0	$3,180,000.0	$38,345,000.0	$97,600,000.0
Total	$2,793,835	**$8,867,800**	$8,481,833	$8,127,100	$8,410,266	$8,310,500	$85,292,173	$182,812,346
				Annual averages for 10 and 20 year projections			$17,058,435	$18,281,235
				20 Year Projected Grand Total				$313,095,853

*column represents the cumulative expenses for the 5 years between year 6 and year 10

**column represents the cumulative expenses for the 10 years between year 11 and year 20

CONTENTS

INTRODUCTION

The Fiscal Year (FY) 2025/2026 Capital Improvement Program/Plan (CIP) is a five-year plan for budgeting and planning of District water and sewer facility and infrastructure improvements. The CIP is used to identify, prioritize and schedule necessary improvements. The CIP is also a tool to assist with rate setting and identification of funding sources for future projects. The CIP consists of projects that require major financial and human resources in a scheduled format. Interdependency of year-to-year project selections is a major consideration to ensure an efficient and orderly progression of improvements. Routine maintenance and operational repairs are excluded from CIP and are instead budgeted under regular O&M expenditures.

Criteria for CIP project selection includes projects that reduce maintenance and cost to the District, improve service and reliability, and provide for water security and infrastructure resiliency. The CIP is also used as the master plan for scheduled infrastructure replacements based on performance and useful life expectancy.

The CIP will inform and assist with the District's annual budgeting process as well as inform the rate and capacity charge setting process. The ten- and twenty-year projections are intended for planning purposes. These estimates represent known expenses that will impact the District's finances on a longer-term planning horizon than a standard five-year CIP does. These long-term projections do not represent planning-level cost estimates and do not constitute an exhaustive list or committed project schedule. The ten-year and twenty-year projections are intended to inform financial planning, rate setting and grant writing efforts so that the District can remain financially sustainable into the future.

The projected values reflected in these pages are in 2025 dollars with no consideration of potential inflation.

BACKGROUND

The District was formed in 1952 to provide water and wastewater services to the unincorporated areas of Eureka. Over the years, the District has expanded the service area to include Myrtletown, Pine Hill, Humboldt Hill, Fields Landing, King Salmon, and Freshwater. Expansion was accomplished both by District construction of facilities, such as in Myrtletown and Cutten, and by acquisition of existing facilities such as the Pialorsi water system in Humboldt Hill and the County Service Area No. 3 in King Salmon and Fields Landing.

Between 1974 and 1980, the Capital Improvement Program consisted mainly of equipment and plant purchases. From 1980 to 1990, the CIP included revenue bond financing of major water supply, distribution and storage projects. From 1990 onward, the District adopted a formal five-year CIP process that focused on steel main replacement and sewage lift station upgrades. The structured program has resulted in increases in production and project completion. Capital expenditures have also increased from an average of 10% in earlier decades to over 30% of the total budget in recent fiscal years as the District's aging system requires replacements and improvements.

Ten-year and twenty-year projections (titled Years 6-10 and Years 11-20 in the tables for clarity), developed for this plan, indicate that the District's capital expenditures will need to accelerate to keep pace with necessary renewal of the aging infrastructure some of which has already come to the end of its useful life. This includes over 114 miles of water mains and 73 miles of sewer mains, some of which will be approaching 100 years old at the end of the 20-year planning horizon.

In 2016, the City of Eureka received a Cease-and-Desist Order (CDO) regarding discharges to Humboldt Bay. At the time, the CDO required compliance with a "Blending Prohibition" by 2028 and full

compliance with the State's *Enclosed Bays and Estuaries Policy* by 2032. The Waterboard has adopted a National Pollutant Discharge Elimination System (NPDES) Permit that requires compliance with these prohibitions by 2028 and 2042 respectively while at the same time rescinding the CDO. Currently, the City's estimate for compliance with the "Blending Prohibition" is as much as $20M which will require a District contribution of about $7M. The projects to address the Blending Prohibition are currently scheduled by COE to occur during FYs 25/26 and 26/27.

Additionally, the City will be required to completely comply with the Enclosed Bays and Estuaries Policy by 2042, which may require the construction of an ocean outfall or a complete rehabilitation of the treatment plant. Based on studies commissioned by the City, District staff has estimated that this effort will cost at least $60M with an HCSD contribution on the order of $20M. That value is included in the 6-to-10-year and 11-to-20-year projection as a loan repayment to spread the cost over as much time as possible.

WATER

The District's water distribution and storage system is complex, consisting of twenty-two (22) different pressure zones, ten (10) water storage tanks containing 5.0 million gallons (MG) of storage capacity, and twelve (12) water booster pumping stations. The District's water related capital expenditure plan is detailed in Table 3 and Table 4.

Water supply is furnished by three sources. Approximately one half of the District's consumption is purchased from the Humboldt Bay Municipal Water District (HBMWD) through the Truesdale booster pump station; one quarter is purchased from the City of Eureka (who purchases it from HBMWD) through the Hubbard and Harris booster pump station; the final quarter is pumped from District owned wells located in the Humboldt Hill area that draw off of the Eureka Plain Groundwater Basin near the Elk River.

These three water sources supply the three major service areas of the District. Hubbard and Harris pump station (water purchased from the City of Eureka) supplies the northern area of Myrtletown, Mitchell Road, Freshwater and Pigeon Point (Freshwater/Mitchell Road Zone). Truesdale pump station (water purchased from HBMWD) supplies Cutten, Rosewood, a portion of Pine Hill, Ridgewood and Elk River (Ridgewood Zone). District well water supplies the southern area of Humboldt Hill, King Salmon, Fields Landing, College of the Redwoods and a portion of Pine Hill (Humboldt Hill Zone).

Using the District's current infrastructure, water can be moved from the Ridgewood zone to the Humboldt Hill Zone and to the Freshwater/Mitchell Road Zone. Water can also be moved from the Freshwater/Mitchell Road Zone to the Ridgewood Zone. Using current infrastructure, water cannot be moved from the Humboldt Hill Zone to the Ridgewood or Freshwater/Mitchell Road Zones. This could prove problematic during a regional emergency because all of the District's current wells are located in the Humboldt Hill Zone.

Interties also exist between the City of Eureka water system and the District for emergency purposes. In most places, the City of Eureka pressure grid is approximately 5 psi greater than the District pressure grid. There are areas where the District's delivered pressure is higher than the City's pressure at the District's boundary. Although these District service/supply interties exist, moving water from one service zone to another is complicated by undersized transmission mains and under capacity storage volume necessary to supply both zone demands concurrently.

Systematic Steel Main Replacement

The systematic steel watermain replacement program was initiated in the early 1990s to replace approximately 15 miles of steel watermain most of which was installed in the 1950s. There are a total of 5 steel main replacement (SMR) projects remaining with a total length of less than a half a mile that are scheduled over the next several years. Three of these SMR projects are scheduled for the coming fiscal year. These projects are listed in Table 4, marked with an SMR for Steel Main Replacement.

Water Tank Rehab

During FY 2017-18, the District performed an assessment of three water storage tanks; Walnut Drive 1MG, Ridgewood and Donna Drive. The inspections revealed that all three tanks required rehabilitation including recoating, structural rehabilitation and were in need of safety upgrades for fall protection, venting and cathodic protection. The Walnut Drive and Ridgewood tanks were the highest priority. The Walnut Drive 1MG tank rehabilitation was completed during FY 20/21, the Ridgewood Tank rehabilitation was completed during FY 21/22 and the Brier Lane Tank rehabilitation was completed in FY 22/23. Construction on the Donna Drive Tank rehabilitation was begun during FY 24/25 and will be completed during the summer of 2025. During FY 25/26, the District will be inspecting six additional water storage tanks so that design efforts can commence. District staff has determined that rehabilitating two tanks concurrently provides opportunities to access economies of scale, thereby reducing per-unit project costs to the District.

During the five-year term of this Capital Improvement Plan, the following water storage tanks are scheduled for rehabilitation; Donna Drive 0.5MG (2025), Walnut Drive 0.5MG (2027), the Cummings Road tank (2027), the Dana Lane Tank (2029) and the Blue Spruce Tank (2029). The District will rehabilitate the remaining tanks within the ten-year planning horizon. The following table provides some detailed information regarding the District's water storage facilities (Table 2).

Table 2: The tabulated data shows details regarding the District's water storage tanks.

Water Storage Tank Data					
Location/Name	**Volume (MG)**	**Height (Feet)**	**Diameter (Feet)**	**Date Constructed**	**Date Refurbished**
Blue Spruce	1	35	72	2002	Planned 2029
Brier Lane	0.5	32	52	1982	2023
Cummings	0.12	24	30	1991	Planned 2027
Dana Lane	0.375	30	48	1992	Planned 2029
Donna Drive	0.5	24	61	1988	2025
Lentell	0.15	20	37	1992	--
Pigeon Point	0.17	24	35.5	1996	--
Ridgewood	0.5	52	40	1982	2021
Walnut Drive	1	40	67	1971	2020
Walnut Drive	0.5	34	50	1952	Planned 2027

Pump Station Rehab/Upgrade

The District maintains twelve (12) water booster or pump stations. These include South Bay Well, Spruce Point Well, Blue Spruce Booster, Donna Drive Booster, Truesdale Pump Station, Ridgewood Pump Station, Hubbard Pump Station, Cummings Road Booster, Mitchell Road Booster, Lentell Booster, Kluck Booster, and Pigeon Point Booster. Some of these stations pump water out of the ground and up to a tank (South Bay Well and Spruce Point Well). Other stations move water from a low elevation up to a tank at a higher elevation and operate under level control (Blue Spruce Booster, Truesdale Pump

Station, Ridgewood Pump Station, Cummings Road Booster, Mitchell Road Booster, Pigeon Point Booster, and Hubbard Pump Station). The remaining stations pressurize water using hydropneumatics to deliver water with sufficient pressure to connections whose elevation cannot be reached by the nearest pressure zone (Donna Drive Booster, Lentell Booster, and Kluck Booster).

In 2023, a shelter was constructed at South Bay Well to protect the wellhead and pump motor. In 2024, a third pump was added to the Hubbard Pump Station and Ridgewood Booster Station to provide redundancy and supply resiliency. Over the next five years, Truesdale, the District's primary pumping station, will receive an updated Motor Control Cabinet (MCC) as well as replacement pumps. This project is necessary because installed equipment is past its useable life. Standby generators will be added to the Hubbard Booster Station and Spruce Point Well in 2026. A retaining wall at the Pigeon Point Booster Station has failed and is threatening access to the station; the wall will be rehabilitated in 2026. The buildings that protect the Pigeon Point Booster Station and Donna Drive Booster Station will be rehabilitated in 2027. Other projects will need to occur in the 6-to-20-year time frame but are not yet scheduled or budgeted.

Table 3: Capital improvements planned for Humboldt Community Services District water pumping and storage facilities.

WATER		Current FY 24-25	Scheduled FY 25-26	Projected FY 26-27	Projected FY 27-28	Projected FY 28-29	Projected FY 29-30	Projected Years 6 to 10*	Projected Years 11 to 20**	Comments
			1	2	3	4	5			
WATER SYSTEM IMPROVEMENTS										
C=Contract										
PUMPING FACILITY UPGRADES										
Water Sample Stations		$35,000								
Brier Lane 0.5 MG Tank	C	$5,600	**$61,800**							Engineering 22/23 Rehabilitation 23/24
Ridgewood Tank	C	$34,000								Tank Rehab, demobilize, fence
AMR Program		$275,200	**$375,000**	$210,000	$210,000	$210,000	$210,000	$1,050,000	$2,100,000	Replace Ten Percent Stock Per Year
Truesdale WBS		$32,600	**$35,000**	$35,000	$35,000	$35,000	$35,000			New pumps/Upgrade
SCADA Upgrade		$200,000	**$150,000**	$150,000						
Hubbard Booster Station		$16,000	**$65,000**							Upsize pump/ mod system Generator
Donna Drive 0.5 MG Tank	C	$285,500	**$484,500**							Engineering and Temp System 23/24 Rehab 24/25
South Bay School Backflow Device		$0	**$20,000**							
Spruce Point Well	C	$60,000	**$65,000**						$2,000,000	Submersible Pump, Generator then Rehab in 11-20 year
Walnut Drive 0.5 MG Tank	C	$44,000		$375,000	$350,000	$20,000				Inspections 24/25 Rehabilitation 26/27
Pigeon Point Wall			**$75,000**							
South Bay Well Electrical Upgrades			**$20,000**							
PRV Program			**$10,000**	$10,000	$10,000	$10,000	$10,000	$50,000	$50,000	Annual PRV Rehab/Replacement
Hubmboldt County ADA Access			**$5,500**	$5,500	$5,500	$5,500	$5,000	$25,000	$50,000	
Tank Rehab Analysis/Design			**$100,000**	$50,000	$50,000	$50,000	$50,000			Engineering 25/26 Rehabilitation 26/27 inspections 27/28
Cummings Road Tank	C			$375,000	$350,000	$45,000				Rehab/roofing/siding
Pigeon Point WBS				$30,000						Siding, roofing and drainage
Donna Drive WBS	C			$75,000						
Dana Lane Tank					$350,000	$375,000		$20,000		
Standby Generators				$100,000	$100,000	$100,000	$100,000	$500,000	$1,000,000	
Hubbard MCC and Pumps Update					$125,000					
Princeton Well						$1,250,000				Reestablish a well on District owned property
Blue Spruce Tank							$850,000			
Meyers Well									$1,000,000	Replace failed well on District owned property
Water Resiliancy at Little CA St.							$800,000	$1,500,000		Booster Station and Well
Rehabilitate Remaining Tanks								$4,000,000	$9,000,000	
Water Pumping Facilities Totals		$987,900	**$1,466,800**	$1,415,500	$1,585,500	$2,100,500	$2,060,000	$7,145,000	$15,200,000	$31,961,200

Table 4: Capital improvements planned for Humboldt Community Services District water main replacements.

WATER			Current	Scheduled	Projected	Projected	Projected	Projected	Projected	Projected	Comments
			FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Years 6 to 10*	Years 11 to 20**	
CAPITAL IMPROVEMENTS - WATER				1	2	3	4	5			Water main replacements
WATER MAIN REPLACEMENTS	**C=Contract**										$300/LF except as noted
	SMR=STEEL MAIN REPLACEMENT										
	ACMR=ASBESTOS CEMENT MAIN REPLACEMENT										
		LF									
New Connections			$10,000	**$15,000**	$15,000	$15,000	$15,000	$15,000	$75,000	$150,000	New connections
Walnut EQ Repair			$0	**$650,000**							Grant Funded
Crane Street	SMR	850	$88,760	**$210,000**							$350/LF
Shady Lane	SMR	400		**$140,000**							$350/LF
Meadowood	SMR	400		**$200,000**							$500/LF
Vista Tie In Phase 1	C	700		**$155,000**	$100,000	$100,000					$500/LF
Vista Tie In Phase 2	C	700		**$108,000**	$100,000	$250,000					$500/LF Includes Hillcrest and Gayhana
Mitchell Road	C	3400			$368,333	$1,105,000	$736,666				Myrtle to Cummings on Mitchel Road $650/LF
Beechwood Dr.	SMR	370			$185,000						$500/LF
Austin Court	SMR	260			$130,000						$500/LF
College Streets Upgrade ACMR	ACMR	3700				$925,000	$925,000				$500/LF
North and South Distribution Connection		2000						$1,000,000			$500/LF
AC Water Main Replacement Program		272694							$30,000,000	$80,000,000	AC Mains @ $400/LF
Water Main Replacement Totals			$98,760	**$1,478,000**	$898,333	$2,395,000	$1,676,666	$1,015,000	$30,075,000	$80,150,000	$117,786,759

*column represents the cumulative expenses for the 5 years between year 6 and year 10
**column represents the cumulative expenses for the 10 years between year 11 and year 20

SEWER

The District's sewage collection system is straightforward in concept. All sewage collection gravity flows or is pumped to the City of Eureka's Elk River Wastewater Treatment Facility for treatment. By agreement, the District owns 32.1% of the current plant capacity. Annually the District sends approximately $2.2M to the City of Eureka for operation and maintenance of the regional facility. This represents about half of the total sewer related operating expenses budgeted for FY 25/26. In addition, the District projected contributions to sewer related CIPs at the City of Eureka over the next five years average, $2.15M annually. This represents over 40 percent of the District's total CIP budget for sewer related capital spending over the five-year planning horizon.

The hilly terrain and historical piecemeal development within the District has resulted in a system that includes 28 sewer lift stations. For comparison, the McKinleyville Community Services District (MCSD) operates six lift stations, City of Arcata operates eight stations, and City of Fortuna operates five stations. The City of Eureka, which is adjacent to and with similar topography as the District, operates 26 stations. Under current operations, the District has no alternative but to upgrade and replace many of these stations to achieve reduced maintenance, emergency call-out and sewage overflow potential.

The District's sewer related capital expenditure plan is detailed in Table 5 and Table 6.

Martin Slough Lift Station Reversals

In the early 1980's the concept of a regional sewage lift station serving both the City of Eureka and District customers in the Ridgewood, Pine Hill and City Golf Course area was explored. The stated objectives were threefold: I) To eliminate approximately three major and three minor City and 13 minor District lift stations; 2) Reduce the large pumping and maintenance costs associated with pumping into cascading lift station systems, which pumps along an indirect route, completely around the City through the cross-town interceptor and 3) Provide for future development of approximately 5,000 new residential units in the non-sewered areas of Westgate and Ridgewood as well as expansion of the Cutten area.

Another stated benefit of this project is to redirect the City of Eureka' s "O" Street sewage lift station to the new Martin Slough Interceptor, thereby freeing up capacity in the City's northeast (Myrtletown) sewage drainage area. Before the Martin Slough Interceptor project, the City's northeastern collection system was at capacity.

Over the years, the project morphed into the Martin Slough Interceptor project for which construction was completed in 2015. By 2007, the concept project had been modified to the point that only nine of the District's lift stations had the potential reconfigured to discharge to the Martin Slough Interceptor ('turned' or 'reversed'); Artino, Sea Avenue, Hidden Meadows, Alder, F Street, Hartman, Spruce, Campton, and the metering station at Hemlock. Of these nine, Campton has been "turned" and converted to a metering station, Sea Avenue was connected to the Martin Slough Interceptor during summer of 2024, the Hemlock metering station will be eliminated with the Hemlock rerouting project that is scheduled to be completed 2029, Hartman Ln "reversal" is scheduled to be completed in 2028, and F Street is also scheduled to be "reversed" in 2028.

The remaining six lift stations (Artino, Pine Hill, Hidden Meadows, Alder, and Spruce) are not currently scheduled to be "turned." Some of these lift stations are currently listed in the ten-year projections. They will be prioritized and scheduled as it becomes cost effective to consider performing the necessary work to "turn" these stations. Most of these stations serve very small sewer sheds and the cost of performing the work necessary to "turn" them currently outweighs the resulting benefit. As

development occurs within those sewer sheds, the economics associated with “tuning” these lift stations become more favorable.

In the case of Pine Hill, the Martin Slough Interceptor project was modified at some point between planning and execution so that the Pine Hill lift station cannot flow to the Martin Slough Interceptor. Turning the Pine Hill lift station will require major upgrades to the City of Eureka’s Pound Road lift station. Additionally, the developable land in Westgate and Ridgewood have limited access to the Martin Slough Interceptor as it was constructed and will require extensive infrastructure to accommodate development in those areas.

Lift Station Rehab

The District currently maintains 28 lift stations; Hoover, Alder, Spruce, Foxwood, S. Broadway, Sequoia, Christine, Sea Avenue, Pine Hill, Bailey, Wellington, Beechwood, Moore Ln, Maple Ln, Perch, Buhne, King Salmon, Fields Landing, Blackberry, Hartman, Roth Ct, Artino, Hidden Meadows, Cedar Ridge, Liberty Bell, Edgewood, F Street, and D Street.

The anticipated life of a lift station is between 15 and 20 years. Given that there are nearly 30 lift stations, the District is continually performing rehabilitation activities on these assets. In fact, to keep pace with degradation, the District needs to rehab the equivalent of two lift stations per year. This is in the form of pump upgrades, replacement panel enclosures, rail replacements, lid replacements, and grouting/concrete. Rarely does the District undertake a complete lift station rehabilitation because the ongoing maintenance of the lift stations allows staff to spread the effort and expense across many years and avoid shutting down and re-routing an entire station to accommodate a rehabilitation project.

During the coming five-year period, the District will be performing rehabilitation work on 10 of the 28 lift stations. The lift stations being addressed during the current five-year CIP are Artino, Bailey, Beechwood, Christine, Foxwood, Hoover, King Salmon, Pine Hill, Roth Ct., and Wellington. Additionally, a new lift station is proposed for the intersection of Mike Lane and Park Street and planned for completion during FY 29/30. The District experiences emergency conditions at this location whenever there is excessive precipitation. A new lift station at this location would significantly reduce the probability of sewer overflow.

Trouble Spots (Enhanced Cleaning Locations)

A “Trouble Spot” or “Enhanced Cleaning Location” is a location within the District’s sewer collection system that has given the maintenance staff “trouble” and is in need of periodic attention. The District has a sewer maintenance program to deal with trouble spots in the collection system. When a problem is reported or detected, maintenance staff will investigate the issue to determine the root cause. If the cause of the problem is determined to be the District’s infrastructure, (root intrusion, infrastructure degradation, sagging, damage, design issues, etc.) a project will be initiated and the area will be identified as a trouble spot. Once an area is identified as a trouble spot, that section, area or location is put on a list (work order) to be repaired and prioritized along with other District projects.

During the time between when a trouble spot is identified and when a permanent solution can be implemented, the maintenance staff will make periodic inspections and take temporary corrective action (sewer line cleaning, de-rooting, etc.) as needed. There are currently over 125 work orders for sewer main and lateral line repairs and over 35 for manhole and cleanout repairs that have resulted from the enhanced cleaning/trouble spot program. All 160 of these locations are trouble spots or enhanced cleaning locations that District staff must monitor and maintain until such time that a permanent solution can be implemented.

Trouble spots that are large enough to be considered capital improvements that will be repaired during the next five years include Dr. Office Lane (un-named road at 2826 Harris) (2027), Noe Street (2027), Mesa/Bell Terrace (2028), London Drive at Burns (2026), Ridgewood Drive at Ridgewood Elementary (2028), Summit Ridge to David (2028), Worthington (2029) and Quaker to Mike reroute (2030). There is money included in the ten-year plan for additional trouble spot repairs but those future projects cannot be scheduled at this time because trouble spots develop over time as the system deteriorates.

Systematic Sewer Line Replacement

As the infrastructure ages, the District must consider replacement. The systematic sewer line replacement program takes into account the age of the assets, the history of problems and repairs, critical loading to the asset, the material that the asset was constructed from, and the design life of the asset. As feasible, the District will schedule sewer line replacements for the most vulnerable assets. The most vulnerable of the District's in ground sewer assets are asbestos cement and clay pipes. Over 50 miles of the existing sewer system was constructed in the 1960s and 70s from asbestos cement composite pipe. This material does not hold up well to the sulfur compounds that off-gas from wastewater and must be replaced to reduce Inflow and Infiltration, and to avoid catastrophic failure.

The District is planning to implement an infrastructure renewal program to address these high priority, aged and vulnerable assets. The program is scheduled for the 6-to-20-year timeframe with anticipating annual spending of $3.5M. This accelerated schedule is necessary because all of this infrastructure is currently beyond its useable life and must be replaced.

Outside Agency Obligations

The District is affected by several outside agencies including the City of Eureka, County of Humboldt and the State of California. These agencies impose programs or regulations that require District response. In the case of the County of Humboldt, the District's Pine Hill Bridge HDD project that was completed in FY 20/21 is an example of an outside agency obligation. The County determined that Pine Hill Bridge needed to be replaced. The District owns a watermain that serves as an interconnect between Humboldt Hill and Pine Hill. The District's watermain was attached to Pine Hill Bridge. The District's watermain would be out of service for the duration of the construction project to replace Pine Hill Bridge. This would isolate Humboldt Hill, King Salmon, Fields Landing, and College of the Redwoods from the rest of the District. These communities would be reliant only on the District's ability to provide well water. If there were a problem with the District's wells, the District would have no way to provide water to these communities.

A second example of a County imposed Capital Improvement is the County's Americans with Disabilities Act (ADA) access project(s). The County is working to improve ADA access at intersections and other areas with high foot traffic by incorporating access ramps, bulb out aprons and high visibility, high traction surfaces as well as other improvements. Through the course of this work, the County will disturb many valve cans, meter boxes and other District assets. When these assets are affected by the County's project, the District supplies the materials and labor to ensure that the components are replaced to the District's standards. During FY 21-22 the County surprised the District with a pavement upgrade project on Humboldt Hill. This project resulted in about $45,000 in District labor and materials, over several months, to raise the valve cans and sewer maintenance access points.

City of Eureka CIP

The District's wastewater flows through several metered locations to the City of Eureka (COE, City), through some City infrastructure and eventually to the Greater Eureka Area Wastewater Treatment Plant (GEAWTP). The contract with the City for wastewater treatment specifies that a portion of the

City's capital improvements are the responsibility of the District. This includes 32.1 percent of capital improvements to the GEAWTP as well as specific pumping stations and trunk lines or interceptors. Additionally, the District is contractually obligated to pay for three percent of operation and maintenance to all of the City's wastewater collections and treatment infrastructure that is not covered by the afore-mentioned 32.1 percent. A line item is included in the District's Capital Improvement Plan to cover the anticipated expenses associated with the City's capital improvements.

Greater Eureka Area Wastewater Treatment Plant (GEAWTP)

In 2016, the City of Eureka received a Cease-and-Desist Order (CDO) regarding discharges to Humboldt Bay. At the time, the CDO required compliance with a "Blending Prohibition" by 2028 and full compliance with the State's Enclosed Bays and Estuaries Policy by 2032. The North Coast Regional Water Quality Control Board (NCRWQCB or Waterboard) has adopted a National Pollutant Discharge Elimination System (NPDES) Permit that requires compliance with these prohibitions by 2028 and 2042 respectively while at the same time rescinding the CDO. Currently, the City's estimate for compliance with the "Blending Prohibition" is $20M which will require a District contribution of about $7M spread across FY 26 and 27.

Additionally, the City will be required to completely comply with the Enclosed Bays and Estuaries Policy by 2042, which may require the construction of an ocean outfall or a complete rehabilitation of the treatment plant. Based on studies commissioned by the City, District staff has estimated that this effort could cost as much $60M with an HCSD contribution on the order of $20M. That value is included in the 6-to-10-year and 11-to-20-year projection as a loan repayment to spread the cost over as much time as possible.

The requirements being imposed by the NCRWQCB through the recently adopted NPDES permit include full secondary treatment (blending prohibition), including de-chlorination to all discharge flows to Humboldt Bay, as well as compliance with the applicable water quality objectives for ammonia (full Enclosed Bays and Estuaries Policy Compliance). In short, what this means is that the GEAWTP does not currently have sufficient capacity to treat all of the wastewater that is sent there nor does that facility have the ability to sufficiently remove ammonia from the waste stream. Additionally, the Waterboard may determine that the City cannot continue to discharge to Humboldt Bay at all by 2042.

Although detailed reports have not yet been furnished by the City that document the plans to come into compliance with the NCRWQCBs blending prohibition orders; the wastewater treatment plant upgrades are currently estimated at $20 million by FY 27/28, pending final engineering design and regulatory review. The Wastewater Treatment Agreement with the City specifies that 32.1 percent of capital improvements to the GEAWTP are the responsibility of the District. There is a budget included with the HCSD CIP Contribution to COE line item to cover the requisite upgrades to the GEAWTP.

The anticipated cost of full compliance with the Enclosed Bays and Estuaries Policy has not yet been addressed by the City. Compliance with this requirement as detailed in the current Draft NPDES Permit could result in very expensive upgrades to the City's treatment facility and the District will be required to contribute to the cost of those upgrades. Based on the current agreement, that contribution will be 32.1% of the cost. District staff has estimated that this will cost the District about $20M and a line item has been included with a 15-year loan to cover those expenses within the 20-year planning horizon.

Table 5: Capital improvements planned for Humboldt Community Services District sewer facilities.

SEWER		Current FY 24-25	**Scheduled FY 25-26**	Projected FY 26-27	Projected FY 27-28	Projected FY 28-29	Projected FY 29-30	Projected Years 6 to 10*	Projected Years 11 to 20**	Comments
SEWER FACILITIES			**1**	2	3	4	5			
	V=Vendor									
	C=Contract									
	M=Martin Slough Reversal									
Roth Court SLS		$10,000	**$36,667**							SLS rehab/pumps 24/25 Generator 25/26
Sea Avenue SLS	M	$15,200								Upgrade/Reversal
Allard Access Vault		$20,000								Meter vault upgrade
Foxwood SLS		$25,000	**$36,666**							Pump Replacement 24/25 Generator 25/26
Christine SLS			**$75,000**							New electrical control panel
Fields Landing SLS		$100,000	**$0**							Pump Replacemet
Hoover SLS Upgrade		$70,000	**$130,000**							Upgrade SLS and Flow meters
Artino SLS	C	$8,000		$82,500						Pump Replacement Standby Generator Grant Funded
King Salmon SLS	C	$0	**$15,000**	$82,500						Flood Hardening then Stationary generator
Hoover SLS Flood Hardening		$70,000	**$180,000**	$380,000	$445,000	$495,000				Flood Hardening Grant Funded
Bailey SLS	C			$110,000						Standby Generator Grant Funded
Beechwood SLS			**$36,667**	$55,000						Generator 25/26 Pumps 26/27
Pine Hill SLS Generator	C	$36,915		$102,500	$16,500					Generator 25/26 Panel Enclosure 26/27
SCADA Upgrade		$405,000	**$150,000**	$150,000					$2,000,000	SCADA Systematic Replacement Program
Sewer Pump Rehabilitation				$10,000	$10,000	$10,000	$10,000	$50,000	$100,000	Annual Allotment for Unplanned Sewer Pump Repairs
Wellington SLS					$55,000					Panel Replacement
Stationary Generators					$100,000	$100,000	$100,000	$500,000	$1,000,000	Systematic Standby Generator Program
Mike Lane SLS	C				$100,000	$600,000	$300,000			Create new station, reverse flow on Quaker RE Spill History
Pine Hill SLS Rehab							$220,000			SLS conversion/rehab
Projected COE-EBEP								$6,666,667	$13,333,333	Per COE with 15 year loan to distribute costs
CIP Contribution to COE		$698,000	**$3,670,000**	$3,768,000	$1,100,000	$1,100,000	$1,100,000	$5,500,000	$11,000,000	Based on 2024 COE CIP average five year projection
Sewage Facilities		$1,458,115	**$4,330,000**	$4,740,500	$1,826,500	$2,305,000	$1,730,000	$12,716,667	$27,433,333	

*column represents the cumulative expenses for the 5 years between year 6 and year 10

**column represents the cumulative expenses for the 10 years between year 11 and year 20

Table 6: Capital improvements planned for Humboldt Community Services District sewer mains.

SEWER			Current FY 24-25	**Scheduled FY 25-26**	Projected FY 26-27	Projected FY 27-28	Projected FY 28-29	Projected FY 29-30	Projected Years 6 to 10*	Projected Years 11 to 20**	Comments
SEWER MAINS				**1**	2	3	4	5			Sewer main replacements
MAIN EXTENSION & REPLACEMENTS											
C=Contract											
M=Martin Slough Reversal											
V=Vendor											
New Connections			$6,618	**$5,500**	$5,500	$5,500	$5,500	$5,500			
Walnut EQ Repair	C		$0	**$500,000**							Grant Funded
Hemlock	M,C	4500		**$80,000**	$440,000	$440,000	$440,000				Per footage and manhole count
Noe Street	C			**$75,000**	$200,000						
Walnut Drive Laterals	C			**$65,000**							
London Drive at Burns	C	760	$4,118	**$260,000**	$120,000						$500/LF
Hartman Lane	M,C	900			$120,000	$550,000					Engineering 26/27 Reversal 27/28
Dr. Office Lane	C	370	$30,000		$222,000						Per Engineer's Estimate
South Broadway FM	C	11700			$110,000	$350,000	$820,000	$2,340,000	$7,020,000		$1000/LF per Engineer's Estimate
F Street	M,C	900			$45,000	$450,000					Engineering and $440/LF
Ridgewood Drive	C	200				$88,000					$440/LF
Summit Ridge to David	C	265				$116,600					$440/LF
Spruce SLS	M,C	1215				$55,000	$534,600				Engineering 27/28 Reversal 28/29
Mesa /Bell Terrace/B-Loma	C	700				$65,000	$308,000				Engineering and $400/LF
Worthington St.		125					$55,000				$440/LF
Quaker Park Mike	C	1000						$400,000			$440/LF
Humboldt Hill Sewer Sys								$550,000	$2,750,000	$5,500,000	
Fields Landing FM		7150							$3,146,000		$440/LF
Martin Slough Reversals	M								$1,650,000	$3,300,000	
Trouble Spots									$1,650,000	$4,950,000	
Gravity Main Replacement		265,000							$15,000,000	$38,000,000	$200/LF District Wide AC and Clay
Forcemain Replacement		12883							$1,889,506	$3,779,013	$400/LF District Wide Aging Forcemains
Sewer Main			$40,736	**$985,500**	$1,262,500	$2,120,100	$2,163,100	$3,295,500	$33,105,506	$55,529,013	

*column represents the cumulative expenses for the 5 years between year 6 and year 10

**column represents the cumulative expenses for the 10 years between year 11 and year 20

ROLLING STOCK

Rolling Stock includes all vehicles and construction equipment that the District owns. Some of the vehicles are used to transport personnel and equipment, others are used to transport materials to or from construction sites. Equipment includes tractors, trailers, truck mounted sewer cleaning and camera equipment, specialty underground boring equipment, and specialty large scale plumbing equipment. Rolling Stock covers any equipment that the District uses that is on tracks or wheels.

The District's current policies include replacement schedules for Rolling Stock based upon mileage, age, hours of operation, and repair history. If any of these criteria are exceeded, a piece of equipment becomes eligible for replacement. The District Management uses discretion to determine which equipment will be recommended for replacement based on the critical nature of the equipment, the expected longevity, redundant assets, and other contributing circumstances. Some equipment replacement is unavoidable while others are less necessary.

Details regarding the capital expenditures associated with the District's rolling stock can be found in Table 7.

Light Duty

During the next five years, the District will be replacing two 2012 Ford construction truck. These two vehicles are scheduled for replacement due to age, reliability and repair cost. One was scheduled for replacement during FY 2025 and the District is currently expecting delivery. The second is scheduled for FY 2026. Additionally, the District will be replacing a 2005 Dodge utility truck and two Toyota meter reading trucks with over 100,000 miles each. The meter trucks are typically not surplussed when they are replaced; they are moved to lighter service and used for small repair work, transporting personnel to offsite work and for out of town travel. An older meter truck that has been on light service for several years will be surplussed when a new meter truck is purchased. District staff will be seeking zero emissions vehicles whenever possible. Staff expects to find zero emissions solutions for the replacement meter trucks.

Table 7: Capital improvements planned for Humboldt Community Services District rolling stock.

REVENUE FUNDED CAPITAL PROGRAM PROJECTIONS					Current FY 24-25	**Scheduled** **FY 25-26**	Projected FY 26-27	Projected FY 27-28	Projected FY 28-29	Projected FY 29-30	Projected Years 6 to 10*	Projected Years 11 to 20**	Comments
VEHICLES / EQUIPMENT						**1**	2	3	4	5			
			C=Contract **V=Vendor**										
Light Duty Service Vehicles				Mileage Hours									
3	2012	Ford 4x4	V	*102,764*	$75,000								Age/Repair History
2	2012	Ford 4x4	V	*111,248*		**$95,000**							Age/Repair History
11	2017	Toyota Meter Truck	V	*109,000*			$65,000						Age/Mileage
16	2005	Dodge 4x4	V	*107,000*				$100,000					Age/Mileage
11	2020	Toyota Meter Truck	V	*109,000*					$65,000				Age/Mileage
15	2017	Ford Service	V	*75,000*						$100,000			Age/Mileage
		Fleet Replacement Program									$2,000,000	$4,000,000	
Heavy Duty Equipment													
Specialty Equipment													
		Riding Mower			$7,769								
		Truck Radio Repeater			$6,595								
		Sewer Push Camera			$15,145								
		Hydrostatic Pressure Pump			$5,000								
				Vehicles & Equipment	$109,509	**$95,000**	$65,000	$100,000	$65,000	$100,000	$2,000,000	$4,000,000	$6,534,509

*column represents the cumulative expenses for the 5 years between year 6 and year 10

**column represents the cumulative expenses for the 10 years between year 11 and year 20

OFFICE AND CORPORATION YARD IMPROVEMENTS

The District office and corporation yard are critical to the daily operation of the District's systems, assets, and services. This facility serves as a meeting place for personnel, work space for administration, customer service and engineering staff, a location to hold Board of Directors meetings as well as facilities for equipment and vehicle storage, maintenance and repair. As with the rest of the District's assets, the office and corporation yard requires capital improvement planning to keep the facilities useful, safe and up to date. During the current five-year planning period, the District will be completing repairs to the office building exterior, rehabilitating the small truck storage facility, repairing pavement in the corporation yard and the parking lot, constructing a shelter to protect the maintenance sewer cleaning truck (Vac Truck), constructing staff restrooms at Hoover and South Broadway lift stations, and planning the corporation yard expansion that will be necessary as growth occurs in the District.

The District's office and corporation yard related capital expenditure plan is detailed in Table 8.

Table 8: Capital improvements planned for Humboldt Community Services District's office and corporation yard.

REVENUE FUNDED		Current	**Scheduled**	Projected	Projected	Projected	Projected	Projected	Projected	Comments
CAPITAL PROGRAM PROJECTIONS		FY 24-25	**FY 25-26**	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Years 6 to 10*	Years 11 to 20**	
BUILDING, YARD & PAVING IMPROVEMENTS			1	2	3	4	5			
Office ADA		$30,000								20% of building remodel cost
Drying Bed Cover		$1,715								Replacement
Breakroom Roof	C	$34,000								Roof Replacement/Age
Office Building Exterior phase 2	C	$10,000	**$75,000**							Upstairs Siding and Windows
Small Truck Garage	C	$21,000	**$105,000**							Rehabilitation
Vehicle Storage Upgrades		$2,100	**$25,000**							VacCon Storage
Yard Paving Repairs			**$40,000**							Pavemeint Repairs in Corp Yard
External and Parkinglot Paving	C		**$75,000**							
Restrooms at Hoover and South Broadway			**$75,000**							
Parks Study			**$15,000**							
Computers and IT			**$2,500**							
Grant Writing/Engineering Studies			**$100,000**	$100,000	$100,000	$100,000	$100,000	$500,000	$1,000,000	
Security and Paving Improvements	C			$100,000						
Engineering for Facilities Expansion					$100,000					
Site Clearing for Expansion						$100,000				
Yard and Facilities Expansion	C						$110,000	$250,000		
Office and Yard Facility Upgrades									$500,000	
Building and Yard		$98,815	**$512,500**	$200,000	$200,000	$200,000	$210,000	$750,000	$1,500,000	

*column represents the cumulative expenses for the 5 years between year 6 and year 10

**column represents the cumulative expenses for the 10 years between year 11 and year 20

GRANT PROGRAM

In FY 21/22, the District initiated a grant writing program to identify and procure assistance funding to help offset accelerating capital improvement costs. During FY 21/22 we focused efforts on FEMA's Hazard Mitigation Grant Program (HMGP). This program is coupled to the County's Hazard Mitigation Planning efforts that the District participates in. Projects identified in the District's Hazard Mitigation Plan are eligible for federal funding assistance through the HMGP.

The District has applied for over $35M in grant funding and continues to identify and pursue grant opportunities. The current applications include a critical power project that will include standby generators at the Pine Hill, Bailey, and Artino SLS, a 3.5-mile forcemain replacement project connecting the Fields Landing and South Broadway SLSs to the GEAWTP, and a source water resiliency project to connect the well field in Humboldt Hill to the northern part of the District. Grants that have been awarded include an earthquake repair project for infrastructure within Walnut Drive and a flood hardening project at the Hoover SLS. Funds from these grants will directly offset the cost of the associated projects allowing the District to apply CIP money to other critical projects in future years. The grant writing program will continue into the future. Budget allocation for grant writing assistance is reflected in Table 8

EXTENDED PROJECTIONS

Historically, the Capital Improvement Plan is a five-year projection and schedule for capital projects and expenditures. This format captures some very important information about the near future of the District and helps to plan, prioritize and schedule projects that will impact the District's budget and workforce. What is missing from the CIP is a longer view of infrastructure needs based on the state of the system. The five-year CIP only addresses those projects that are immediately necessary and does not enable the District to plan and save for the much larger looming needs associated with aging infrastructure renewal.

This document incorporates ten and twenty-year projections that capture known long-term improvements that the District will need to undertake in the foreseeable planning horizon. Placing these items in print will enable staff to strategize and plan for the anticipated improvements that will be necessary in the future to keep District operations on track and sustainable.

Extended projections are included in all of the tables detailing capital expenditures planning (Table 1 and Table 3 through Table 8)

Ten Year

The ten-year planning horizon includes some large expenditures that the District needs to be planning for. These include upgrading the GEAWTP, Martin Slough reversals, force main replacements, gravity sewer replacements, water distribution systematic replacement, water storage tank rehabilitation, and ongoing fleet replacement. These ten-year totals are not all inclusive, and are intended for budgetary planning purposes only. Over the ten-year horizon, the District will be facing $90M in capital expenses. These projects and expenses are critical to the continued operation of the District and represent an accelerated level of spending as compared to the District's historic budgeting for capital improvements. The current capital expenditures over the next five years average $8.4M annually. To meet the projected $90M of expenditures at the ten-year horizon, the District will need to accelerate annual spending to $18M annually.

Twenty Year

Similar to the ten-year projections, the twenty-year projections indicate anticipated expenditures for the twenty-year planning horizon. Again, these expenditures are not all inclusive, they do represent anticipated expenditures that the District needs to plan for. Included on the twenty-year horizon are additional systematic main replacements (water and sewer), storage tank rehabilitation, source water development for resiliency, office/corporation yard improvements and expansion, as well as ongoing fleet replacement. Once again, these projection estimates are not all inclusive but represent those expenditures that can be anticipated that are not being addressed in the five-year CIPs.

The financial impact at the 20-year planning horizon is an additional $180M. What this means is the District should be planning for annual expenditures on the order of $18M annually between years 11 and 20.

Fifty Year

While it is impossible to accurately predict what will happen on the fifty-year planning horizon, the design life of most water and sewer infrastructure is fifty years. What this means is that a project that is constructed today will predictably be at its end of life in fifty years. Likewise, a project that was constructed in 1975 is currently at its end of life. The majority of the District's underground infrastructure was constructed well over fifty years ago and, therefore is already due for replacement.

Over the 20-year planning horizon, District staff have developed a plan to rehabilitate or replace the most vulnerable of this underground infrastructure. The total projected cost of combined underground infrastructure (water and sewer) rehabilitation and replacement over the next 20-years is $216M. This suggests an annualized cost of $10.8M over the 20-year planning horizon. This is based on the cost projections for only the most vulnerable assets that have suffered the effects of deferred maintenance.

The District owns and maintains a combined 190-miles of underground mains (water and sewer). The current cost per foot of construction used for budgetary purposes is $600/linear-foot of pipe (for reference, the current engineering estimate of probable construction cost for the South Broadway Forcemain project is $1,400/linear-foot and the engineer's estimated cost for the Walnut Earthquake Repair is over $900/linear-foot). If the District were to create a plan to replace all underground infrastructure over a fifty-year schedule, using $600/linear-foot, the resulting annual cost would be $12M. This is very similar to the value as what is projected for the critically neglected infrastructure over the coming 20 years. What this says is that the District can anticipate CIP spending to continue at the rate projected for the 20-year planning horizon into perpetuity.

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