

1. 2:00 P.M. Agenda

Documents:

[2023-03-14 Public Works And Streets Agenda.pdf](#)

2. Meeting Material

Documents:

[Yachats PW Report Feb 2023.Pdf](#)

[Water Report 3.1.23.Pdf](#)

[2023-01 Financial Report Public Works.pdf](#)

[2023-02-14 Meeting Summary Public Works.pdf](#)

[Yachats Conservation Encouragement-1.Pdf](#)

[Yachats DWPP Monitoring Plan.pdf](#)

[Yachats Parking Plan Recommendations.pdf](#)

3. Additional Documents Added After Meeting

[https://Library.municode.com/Or/Waldport/Munidocs/Munidocs?  
NodeId=38e7e492f5935](https://Library.municode.com/Or/Waldport/Munidocs/Munidocs?NodeId=38e7e492f5935)



CITY OF YACHATS

**PUBLIC WORKS & STREETS COMMISSION MEETING**

**Tuesday March 14, 2023, at 2:00pm**

To Be Held Via Zoom & In Person Located at:

Commons Bldg., Civic Meeting Room 1

441 Hwy 101 N., Yachats OR 97498

Join Zoom Meeting

<https://us02web.zoom.us/j/86437265216>

Meeting ID: 864 3726 5216

One tap mobile

+12532158782,,86437265216# US (Tacoma)

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**AGENDA**

- I. Meeting Called to Order
- II. Announcements and Correspondence
- III. Citizens' Concerns (limited to items not on the agenda, 5-minute limitation per person)
- IV. Reports (Written reports)
  - a. Public Works Report
  - b. Finance Report (Groth)
  - c. Emergency Preparedness Report (Cox)
  - d. Meeting Summary (Informational)
- V. Current Business
  - a. Hwy 101 Delineators (West & McClung)
  - b. PW&SC Goals
- VI. New Business
  - a. Water Conservation Study Final Submittal Status (McClung)
  - b. Transportation System Plan (TSP) Introduction (McClung)
  - c. Parking Study Recommendations (J. Theilacker)
- VII. Other Business
  - a. From Commission
  - b. From Staff

This meeting is open to the public, and all interested persons are invited to attend. This meeting will be audio taped. All items to be considered by the Commission must be submitted to City Hall no later than one week prior to the meeting. Minutes of all public meetings are available for review on the City website at [www.yachatsoregon.org](http://www.yachatsoregon.org). In accordance with ORS 192.630, City of Yachats will make a good faith effort to provide accommodations for any person desiring to attend a public meeting, if the request is made at least 48 hours in advance of the meeting time. The meeting room is physically accessible to persons with mobility devices; a sign language or foreign language interpreter may be available, with advance notice. Call City Hall at 541- 547-3565 or Oregon Relay 1- 800-735-2900 (TDD) two days in advance.

Posted 02/07/2023 By: Kimmie Jackson, Deputy City Recorder



**Date:** March 2, 2023  
**To:** Heide Lambert, City Manager  
**From:** Public Works Department  
**Re:** February 2023 Public Works Report

Rainfall at Yachats Public Works:

|                           | <b>2023</b> | <b>2022</b>   | <b>2021</b> | <b>2020</b> |
|---------------------------|-------------|---------------|-------------|-------------|
|                           |             | <u>Inches</u> |             |             |
| <b>February</b>           | 5.71        | 4.05          | 8.66        | 7.29        |
| <b>Rain year to date:</b> | 15.07       | 9.91          | 19.97       | 21.81       |

Total water produced: **3,488,800 gallons**

Total water accounted for: **3,268,137 gallons**      Water loss efficiency: **93%**

Total wastewater treated: **4,276,000 gallons**

The following is a list of what was done by Public Works staff in February 2023.

**Streets:**

- Potholes filled.

**Storm Drainage:**

- Culvert repair on Pacific Drive.

**Water Treatment Plant:**

- Water systems operations.
- Plant Maintc.
- Cleaned Reedy Creek screen.
- Samples to Newport.
- Lagoon spray field inspected.

### **Distribution Sys:**

- Meter reading.
- Meter maintc.
- 27 radio reads installed.
- Water main repairs on Village Lane and Yachats Ocean Road.

### **Wastewater Treatment Plant:**

- Wastewater systems operations.
- Plant maintc. & clean-up.
- Biosolids operations.

### **Collection Sys:**

- Lift station inspections.

### **Public Works:**

- Shop maintc. and clean up.
- Fleet maintc. & repair.
- Equipment maintc. and repair.
- Multiple locates.
- Brush box handling.
- PW administration.
- 5-yard dump truck repaired.
- Piles picked up for Trails crew.
- Christmas lights and banners removed.
- Cold weather prep.
- Commons trash cans emptied.
- Cleaned Commons gutters.
- Removed public Christmas tree.
- Fueled equipment.
- Power outage response.
- Failing bench removed from park.
- Assisted SLWD with water main repair.



|                                       | 7.2022           | 8.2022           | 9.2022           | 10.2022          | 11.2022          | 12.2022          | 1.2023           | 2.2023           |
|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Gallons of Water Produced</b>      |                  |                  |                  |                  |                  |                  |                  |                  |
| Water Plant                           | 4,981,200        | 5,983,000        | 5,468,700        | 4,517,000        | 4,198,200        | 3,829,500        | 4,462,900        | 3,488,800        |
| <b>Total</b>                          | <b>4,981,200</b> | <b>5,983,000</b> | <b>5,468,700</b> | <b>4,517,000</b> | <b>4,198,200</b> | <b>3,829,500</b> | <b>4,462,900</b> | 3,488,800        |
| <b>Gallons of Accounted for Water</b> |                  |                  |                  |                  |                  |                  |                  |                  |
| Reservoir Level Feet                  | 31.5             | 26.5             | 28.2             | 27.8             | 29.7             | 29               | 24.3             | 30               |
| Reservoir +/- Gallons 41,666 per Foot | 579,157          | 208,330          | 70,832           | 16,666           | 83,332           | 29,166           | 195,830          | 237,496          |
| Waterline Flushing Gallons            | 610,000          | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| Gallons Sold                          | 3,502,419        | 5,267,797        | 4,206,601        | 4,327,576        | 2,554,239        | 3,103,279        | 3,671,984        | 3,030,641        |
| <b>Total Water Accounted for</b>      | <b>4,691,576</b> | <b>5,059,467</b> | <b>4,277,433</b> | <b>4,310,910</b> | <b>2,637,571</b> | <b>3,132,445</b> | <b>3,867,814</b> | <b>3,268,137</b> |
| <b>Final Water Report</b>             |                  |                  |                  |                  |                  |                  |                  |                  |
| Water Loss Efficiency                 | 94%              | 85%              | 78%              | 95%              | 63%              | 81%              | 87%              | 93%              |
| Unaccounted Gallons per Month         | 289,624          | 923,533          | 1,191,267        | 206,090          | 1,560,629        | 697,045          | 595,086          | 220,663          |
| Unaccounted Gallons per Minute        | 6.7              | 21.3             | 27.6             | 4.7              | 36               | 16               | 13               | 5.1              |

Streets Operating 100-1040  
Monthly Financial Detail Report  
JANUARY 2023

Printed: 02/13/2023  
Period 07-07  
Fiscal Year 2023

| Fund | Dept | Account Number | Description                | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes                                  |
|------|------|----------------|----------------------------|-----------------|---------------|------------------|----------------|-------------|----------------------------------------|
| 100  | 1040 | 300101         | Beginning Balance          | \$ 76,346.40    | \$ 76,346.40  | \$ -             | \$ 76,346.40   | 100.00%     | Beginning Balance - Unaudited          |
| 100  | 1040 | 304650         | Tax - State Highway        | \$ 50,000.00    | \$ 33,395.03  | \$ 6,436.91      | \$ 39,831.94   | 79.66%      |                                        |
|      |      |                | REVENUE                    | \$ 126,346.40   | \$ 109,741.43 | \$ 6,436.91      | \$ 116,178.34  | 91.95%      |                                        |
| 100  | 1040 | 105110         | Water Lead                 | \$ 3,000.00     | \$ 1,275.02   | \$ 99.75         | \$ 1,374.77    | 45.83%      | Annual Property/Liability Renewal FY21 |
| 100  | 1040 | 105111         | Wastewater Lead            | \$ 4,000.00     | \$ 3,063.64   | \$ 176.05        | \$ 3,239.69    | 80.99%      |                                        |
| 100  | 1040 | 105112         | Field Utility 2            | \$ 4,000.00     | \$ 357.62     | \$ -             | \$ 357.62      | 8.94%       |                                        |
| 100  | 1040 | 105113         | Field Utility 1            | \$ 3,000.00     | \$ 3,147.50   | \$ 83.93         | \$ 3,231.43    | 107.71%     |                                        |
| 100  | 1040 | 105114         | Field Utility              | \$ 1,500.00     | \$ 1,134.49   | \$ 55.20         | \$ 1,189.69    | 79.31%      |                                        |
| 100  | 1040 | 105140         | Fringe Benefits            | \$ 1,700.00     | \$ 770.29     | \$ 32.10         | \$ 802.39      | 47.20%      |                                        |
| 100  | 1040 | 105141         | Insurance Benefits         | \$ 5,100.00     | \$ 3,161.25   | \$ 133.63        | \$ 3,294.88    | 64.61%      |                                        |
| 100  | 1040 | 105142         | Regular PERS System        | \$ 2,500.00     | \$ 1,407.30   | \$ 57.69         | \$ 1,464.99    | 58.60%      |                                        |
|      |      |                | PERSONNEL                  | \$ 24,800.00    | \$ 14,317.11  | \$ 638.35        | \$ 14,955.46   | 60.30%      |                                        |
| 100  | 1040 | 205222         | Insurance                  | \$ 3,000.00     | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 100  | 1040 | 205311         | Equipment Lease and Rental | \$ 750.00       | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 100  | 1040 | 205312         | Equipment Fuel/Tires/Parts | \$ 3,500.00     | \$ 255.33     | \$ -             | \$ 255.33      | 7.30%       |                                        |
| 100  | 1040 | 205313         | Equipment Repair           | \$ 1,000.00     | \$ 25.17      | \$ 680.88        | \$ 706.05      | 70.61%      |                                        |
| 100  | 1040 | 205317         | Tools and Small Equipment  | \$ 500.00       | \$ 266.91     | \$ -             | \$ 266.91      | 53.38%      |                                        |
| 100  | 1040 | 205361         | Parts                      | \$ 3,500.00     | \$ 1,571.97   | \$ -             | \$ 1,571.97    | 44.91%      |                                        |
| 100  | 1040 | 205362         | Consumables                | \$ 1,000.00     | \$ 980.81     | \$ -             | \$ 980.81      | 98.08%      |                                        |
| 100  | 1040 | 205363         | Outside Services           | \$ 1,000.00     | \$ 1,345.00   | \$ -             | \$ 1,345.00    | 134.50%     |                                        |
| 100  | 1040 | 205411         | Street Lighting            | \$ 20,000.00    | \$ 8,280.36   | \$ 1,671.92      | \$ 9,952.28    | 49.76%      |                                        |
| 100  | 1040 | 205474         | Mowing                     | \$ 13,700.00    | \$ 3,109.00   | \$ -             | \$ 3,109.00    | 22.69%      |                                        |
| 100  | 1040 | 205475         | Tree Removal/Trimming      | \$ 10,000.00    | \$ 7,438.18   | \$ -             | \$ 7,438.18    | 74.38%      |                                        |
|      |      |                | MATERIALS AND SERVICES     | \$ 57,950.00    | \$ 23,272.73  | \$ 2,352.80      | \$ 25,625.53   | 44.22%      |                                        |

| Fund | Dept | Account Number | Description     | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes |
|------|------|----------------|-----------------|-----------------|---------------|------------------|----------------|-------------|-------|
|      |      |                | EXPENSE         | \$ 82,750.00    | \$ 37,589.84  | \$ 2,991.15      | \$ 40,580.99   | 49.04%      |       |
|      |      |                | Revenue Total   | \$ 126,346.40   | \$ 109,741.43 | \$ 6,436.91      | \$ 116,178.34  | 91.95%      |       |
|      |      |                | Expense Total   | \$ 82,750.00    | \$ 37,589.84  | \$ 2,991.15      | \$ 40,580.99   | 49.04%      |       |
|      |      |                | NET GAIN/(LOSS) | \$ 43,596.40    | \$ 72,151.59  | \$ 3,445.76      | \$ 75,597.35   | 173.40%     |       |

Streets Capital Reserve 150-1040  
Monthly Financial Detail Report  
JANUARY 2023

Printed: 02/13/2023  
Period 07-07  
Fiscal Year 2023

| Fund            | Dept | Account Number | Description                    | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes                                |
|-----------------|------|----------------|--------------------------------|-----------------|---------------|------------------|----------------|-------------|--------------------------------------|
| 150             | 1040 | 300101         | Beginning Balance              | \$ 93,906.00    | \$ 93,906.00  | \$ -             | \$ 93,906.00   | 100.00%     | Beginning Balance - Unaudited        |
| 150             | 1040 | 304481         | Grants                         | \$ 100,000.00   | \$ -          | \$ -             | \$ -           | 0.00%       |                                      |
| 150             | 1040 | 314861         | Transfer in General Fund       | \$ 4,000.00     | \$ 2,000.00   | \$ -             | \$ 2,000.00    | 50.00%      |                                      |
| 150             | 1040 | 314883         | Transfer in Urban Renewal      | \$ 13,000.00    | \$ 6,500.00   | \$ -             | \$ 6,500.00    | 50.00%      |                                      |
| REVENUE         |      |                |                                | \$ 210,906.00   | \$ 102,406.00 | \$ -             | \$ 102,406.00  | 48.56%      |                                      |
| 150             | 1040 | 105110         | Water Lead                     | \$ -            | \$ 1,280.86   | \$ -             | \$ 1,280.86    | 0.00%       | Personnel costs for capital projects |
| 150             | 1040 | 105140         | Fringe Benefits                | \$ -            | \$ 116.00     | \$ -             | \$ 116.00      | 0.00%       |                                      |
| 150             | 1040 | 105141         | Insurance Benefits             | \$ -            | \$ 433.79     | \$ -             | \$ 433.79      | 0.00%       |                                      |
| 150             | 1040 | 105142         | Regular PERS System            | \$ -            | \$ 268.97     | \$ -             | \$ 268.97      | 0.00%       |                                      |
| 150             | 1040 | 105150         | Capitalized Labor              | \$ 10,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                      |
| PERSONNEL       |      |                |                                | \$ 10,000.00    | \$ 2,099.62   | \$ -             | \$ 2,099.62    | 21.00%      |                                      |
| 150             | 1040 | 407947         | Capital Outlay-Street Projects | \$ 190,000.00   | \$ -          | \$ 7,526.00      | \$ 7,526.00    | 3.96%       | Jan - Westech Engineering \$7526.    |
| CAPITAL OUTLAY  |      |                |                                | \$ 190,000.00   | \$ -          | \$ 7,526.00      | \$ 7,526.00    | 3.96%       |                                      |
| EXPENSE         |      |                |                                | \$ 200,000.00   | \$ 2,099.62   | \$ 7,526.00      | \$ 9,625.62    | 4.81%       |                                      |
| Revenue Total   |      |                |                                | \$ 210,906.00   | \$ 102,406.00 | \$ -             | \$ 102,406.00  | 48.56%      |                                      |
| Expense Total   |      |                |                                | \$ 200,000.00   | \$ 2,099.62   | \$ 7,526.00      | \$ 9,625.62    | 4.81%       |                                      |
| NET GAIN/(LOSS) |      |                |                                | \$ 10,906.00    | \$ 100,306.38 | \$ (7,526.00)    | \$ 92,780.38   | 850.73%     |                                      |

# Storm Drains Operating 100-1050

## Monthly Financial Detail Report

### JANUARY 2023

Printed: 02/13/2023  
 Period 07-07  
 Fiscal Year 2023

| Fund | Dept | Account Number | Description                  | Budget for Year | Prior Mo Bal | Current Activity | Actual to Date | % of Budget | Notes                         |
|------|------|----------------|------------------------------|-----------------|--------------|------------------|----------------|-------------|-------------------------------|
| 100  | 1050 | 300101         | Beginning Balance            | \$ 60,088.73    | \$ 60,088.73 | \$ -             | \$ 60,088.73   | 100.00%     | Beginning Balance - Unaudited |
|      |      |                | RESOURCES                    | \$ 60,088.73    | \$ 60,088.73 | \$ -             | \$ 60,088.73   | 100.00%     |                               |
| 100  | 1050 | 105110         | Water Lead                   | \$ 2,000.00     | \$ 283.77    | \$ 14.23         | \$ 298.00      | 14.90%      |                               |
| 100  | 1050 | 105111         | Wastewater Lead              | \$ 2,800.00     | \$ 2,153.80  | \$ 91.42         | \$ 2,245.22    | 80.19%      |                               |
| 100  | 1050 | 105112         | Field Utility 2              | \$ 2,000.00     | \$ 1,083.71  | \$ -             | \$ 1,083.71    | 54.19%      |                               |
| 100  | 1050 | 105113         | Field Utility 1              | \$ 2,400.00     | \$ 2,718.85  | \$ 32.68         | \$ 2,751.53    | 114.65%     |                               |
| 100  | 1050 | 105114         | Field Utility                | \$ 1,600.00     | \$ 1,705.46  | \$ 22.10         | \$ 1,727.56    | 107.97%     |                               |
| 100  | 1050 | 105140         | Fringe Benefits              | \$ 1,100.00     | \$ 742.02    | \$ 12.36         | \$ 754.38      | 68.58%      |                               |
| 100  | 1050 | 105141         | Insurance Benefits           | \$ 3,500.00     | \$ 3,185.64  | \$ 49.73         | \$ 3,235.37    | 92.44%      |                               |
| 100  | 1050 | 105142         | Regular PERS System          | \$ 1,700.00     | \$ 1,287.98  | \$ 20.01         | \$ 1,307.99    | 76.94%      |                               |
|      |      |                | PERSONNEL                    | \$ 17,100.00    | \$ 13,161.23 | \$ 242.53        | \$ 13,403.76   | 78.38%      |                               |
| 100  | 1050 | 205313         | Equipment Repair             | \$ 1,500.00     | \$ -         | \$ 1,500.00      | \$ 1,500.00    | 100.00%     |                               |
| 100  | 1050 | 205317         | Tools and Small Equipment    | \$ 1,500.00     | \$ 63.99     | \$ -             | \$ 63.99       | 4.27%       |                               |
| 100  | 1050 | 205367         | Storm Drain Parts            | \$ 6,000.00     | \$ 284.92    | \$ -             | \$ 284.92      | 4.75%       |                               |
| 100  | 1050 | 205368         | Storm Drain Consumables      | \$ 500.00       | \$ -         | \$ -             | \$ -           | 0.00%       |                               |
|      |      | 205369         | Storm Drain Outside Services | \$ 2,500.00     | \$ -         | \$ -             | \$ -           | 0.00%       |                               |
|      |      |                | MATERIALS AND SERVICES       | \$ 12,000.00    | \$ 348.91    | \$ 1,500.00      | \$ 1,848.91    | 15.41%      |                               |
|      |      |                | EXPENSE                      | \$ 29,100.00    | \$ 13,510.14 | \$ 1,742.53      | \$ 15,252.67   | 52.41%      |                               |
|      |      |                | Resource Total               | \$ 60,088.73    | \$ 60,088.73 | \$ -             | \$ 60,088.73   | 100.00%     |                               |
|      |      |                | Expense Total                | \$ 29,100.00    | \$ 13,510.14 | \$ 1,742.53      | \$ 15,252.67   | 52.41%      |                               |
|      |      |                | NET GAIN/(LOSS)              | \$ 30,988.73    | \$ 46,578.59 | \$ (1,742.53)    | \$ 44,836.06   | 144.69%     |                               |

# Storm Drains Capital Reserve 150-1050

## Monthly Financial Detail Report

### JANUARY 2023

Printed: 02/13/2023  
 Period 07-07  
 Fiscal Year 2023

| Fund | Dept | Account Number | Description                    | Budget for Year      | Prior Mo Bal         | Current Activity | Actual to Date       | % of Budget    | Notes                            |
|------|------|----------------|--------------------------------|----------------------|----------------------|------------------|----------------------|----------------|----------------------------------|
| 150  | 1050 | 300101         | Beginning Balance              | \$ 80,000.00         | \$ 80,000.00         | \$ -             | \$ 80,000.00         | 100.00%        | Beginning Balance - Unaudited    |
| 150  | 1050 | 314883         | Transfer in Urban Renewal      | \$ 50,000.00         | \$ 25,000.00         | \$ -             | \$ 25,000.00         | 50.00%         | Quarterly Transfer from 900-9000 |
|      |      |                | <b>RESOURCES</b>               | <b>\$ 130,000.00</b> | <b>\$ 105,000.00</b> | <b>\$ -</b>      | <b>\$ 105,000.00</b> | <b>80.77%</b>  |                                  |
| 150  | 1050 | 105110         | Water Lead                     | \$ -                 | \$ 42.32             | \$ -             | \$ 42.32             | 0.00%          |                                  |
| 150  | 1050 | 105140         | Fringe Benefits                | \$ -                 | \$ 4.31              | \$ -             | \$ 4.31              | 0.00%          |                                  |
| 150  | 1050 | 105141         | Insurance Benefits             | \$ -                 | \$ 22.22             | \$ -             | \$ 22.22             | 0.00%          |                                  |
| 150  | 1050 | 105142         | Regular PERS System            | \$ -                 | \$ 8.89              | \$ -             | \$ 8.89              | 0.00%          |                                  |
| 150  | 1050 | 105150         | Capitalized Labor              | \$ 5,000.00          | \$ -                 | \$ -             | \$ -                 | 0.00%          |                                  |
|      |      |                | <b>PERSONNEL</b>               | <b>\$ 5,000.00</b>   | <b>\$ 77.74</b>      | <b>\$ -</b>      | <b>\$ 77.74</b>      | <b>1.55%</b>   |                                  |
| 150  | 1050 | 407942         | Capital Outlay-Infrastructure  | \$ 35,000.00         | \$ -                 | \$ -             | \$ -                 | 0.00%          |                                  |
| 150  | 1050 | 407947         | Capital Outlay-Street Projects | \$ 50,000.00         | \$ -                 | \$ -             | \$ -                 | 0.00%          |                                  |
|      |      |                | <b>CAPITAL OUTLAY</b>          | <b>\$ 85,000.00</b>  | <b>\$ -</b>          | <b>\$ -</b>      | <b>\$ -</b>          | <b>0.00%</b>   |                                  |
|      |      |                | <b>EXPENSE</b>                 | <b>\$ 90,000.00</b>  | <b>\$ 77.74</b>      | <b>\$ -</b>      | <b>\$ 77.74</b>      | <b>0.09%</b>   |                                  |
|      |      |                | <b>Resource Total</b>          | <b>\$ 130,000.00</b> | <b>\$ 105,000.00</b> | <b>\$ -</b>      | <b>\$ 105,000.00</b> | <b>80.77%</b>  |                                  |
|      |      |                | <b>Expense Total</b>           | <b>\$ 90,000.00</b>  | <b>\$ 77.74</b>      | <b>\$ -</b>      | <b>\$ 77.74</b>      | <b>0.09%</b>   |                                  |
|      |      |                | <b>NET GAIN/(LOSS)</b>         | <b>\$ 40,000.00</b>  | <b>\$ 104,922.26</b> | <b>\$ -</b>      | <b>\$ 104,922.26</b> | <b>262.31%</b> |                                  |

Water Operating 660-1700  
Monthly Financial Detail Report  
JANUARY 2023

Printed: 02/13/2023  
Period 07-07  
Fiscal Year 2023

| Fund | Dept | Account Number | Description                    | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes                                  |
|------|------|----------------|--------------------------------|-----------------|---------------|------------------|----------------|-------------|----------------------------------------|
| 660  | 1700 | 300101         | Beginning Balance              | \$ 268,625.21   | \$ 268,625.21 | \$ -             | \$ 268,625.21  | 100.00%     | Beginning Balance - Unaudited          |
| 660  | 1700 | 304310         | Water/Wastewater Services      | \$ 847,000.00   | \$ 431,754.30 | \$ 70,155.14     | \$ 501,909.44  | 59.26%      |                                        |
| 660  | 1700 | 304320         | Installation Charges           | \$ 6,000.00     | \$ 3,350.00   | \$ 50.00         | \$ 3,400.00    | 56.67%      |                                        |
| 660  | 1700 | 304335         | Rents or Fees                  | \$ 1,000.00     | \$ 460.28     | \$ 30.00         | \$ 490.28      | 49.03%      |                                        |
| 660  | 1700 | 304481         | Grants                         | \$ 38,400.00    | \$ 19,200.00  | \$ -             | \$ 19,200.00   | 50.00%      |                                        |
|      |      |                | REVENUE                        | \$ 1,161,025.21 | \$ 723,389.79 | \$ 70,235.14     | \$ 793,624.93  | 68.36%      |                                        |
|      |      |                |                                |                 |               |                  |                |             |                                        |
| 660  | 1700 | 105101         | City Manager                   | \$ 23,800.00    | \$ 19,008.01  | \$ 1,514.50      | \$ 20,522.51   | 86.23%      |                                        |
| 660  | 1700 | 105102         | Deputy Recorder                | \$ -            | \$ 6,242.53   | \$ 517.78        | \$ 6,760.31    | 0.00%       |                                        |
| 660  | 1700 | 105104         | City Clerk 2                   | \$ 22,400.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105106         | City Accountant                | \$ 10,400.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105108         | Planner                        | \$ 6,700.00     | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105110         | Water Lead                     | \$ 51,000.00    | \$ 32,423.54  | \$ 2,378.97      | \$ 34,802.51   | 68.24%      |                                        |
| 660  | 1700 | 105111         | Wastewater Lead                | \$ 6,000.00     | \$ 5,179.26   | \$ 931.12        | \$ 6,110.38    | 101.84%     |                                        |
| 660  | 1700 | 105112         | Field Utility 2                | \$ 41,400.00    | \$ 3,598.91   | \$ -             | \$ 3,598.91    | 8.69%       |                                        |
| 660  | 1700 | 105113         | Field Utility 1                | \$ 21,500.00    | \$ 16,522.48  | \$ 987.25        | \$ 17,509.73   | 81.44%      |                                        |
| 660  | 1700 | 105114         | Field Utility                  | \$ 7,000.00     | \$ 8,718.27   | \$ 668.02        | \$ 9,386.29    | 134.09%     |                                        |
| 660  | 1700 | 105117         | Capital Projects Coordinator   | \$ 11,200.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105118         | Succession Planning w/ License | \$ 26,100.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105119         | Succession Planning EntryLevel | \$ 21,800.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                                        |
| 660  | 1700 | 105140         | Fringe Benefits                | \$ 26,600.00    | \$ 7,850.71   | \$ 540.61        | \$ 8,391.32    | 31.55%      |                                        |
| 660  | 1700 | 105141         | Insurance Benefits             | \$ 82,300.00    | \$ 27,515.16  | \$ 2,189.60      | \$ 29,704.76   | 36.09%      |                                        |
| 660  | 1700 | 105142         | Regular PERS System            | \$ 39,900.00    | \$ 13,849.99  | \$ 1,095.44      | \$ 14,945.43   | 37.46%      |                                        |
|      |      |                | PERSONNEL                      | \$ 398,100.00   | \$ 140,908.86 | \$ 10,823.29     | \$ 151,732.15  | 38.11%      |                                        |
|      |      |                |                                |                 |               |                  |                |             |                                        |
| 660  | 1700 | 205210         | Dues & Memberships             | \$ 2,100.00     | \$ 675.67     | \$ -             | \$ 675.67      | 32.17%      |                                        |
| 660  | 1700 | 205211         | DEQ Fees                       | \$ 14,000.00    | \$ 12,957.29  | \$ -             | \$ 12,957.29   | 92.55%      |                                        |
| 660  | 1700 | 205212         | Fee Expense                    | \$ 6,000.00     | \$ 3,842.80   | \$ 550.71        | \$ 4,393.51    | 73.23%      |                                        |
| 660  | 1700 | 205222         | Insurance                      | \$ 20,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       | Annual Property/Liability Renewal FY23 |
| 660  | 1700 | 205240         | Office Materials & Supplies    | \$ 10,000.00    | \$ 2,460.13   | \$ -             | \$ 2,460.13    | 24.60%      |                                        |

| <b>Fund</b> | <b>Dept</b> | <b>Account Number</b> | <b>Description</b>                                       | <b>Budget for Year</b> | <b>Prior Mo Bal</b>  | <b>Current Activity</b> | <b>Actual to Date</b> | <b>% of Budget</b> | <b>Notes</b>                                                                                                                      |
|-------------|-------------|-----------------------|----------------------------------------------------------|------------------------|----------------------|-------------------------|-----------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 660         | 1700        | 205251                | Telephones/Cell Phones/DSL                               | \$ 9,500.00            | \$ 5,207.09          | \$ 880.22               | \$ 6,087.31           | 64.08%             |                                                                                                                                   |
| 660         | 1700        | 205253                | Postage                                                  | \$ 3,500.00            | \$ 31.45             | \$ 31.45                | \$ 62.90              | 1.80%              |                                                                                                                                   |
| 660         | 1700        | 205255                | Education and Training                                   | \$ 1,500.00            | \$ 2,110.61          | \$ 155.15               | \$ 2,265.76           | 151.05%            |                                                                                                                                   |
| 660         | 1700        | 205260                | Contract Expense (all Professional, IGA & Personal Svcs) | \$ 27,200.00           | \$ 46,669.23         | \$ 9,864.83             | \$ 56,534.06          | 207.85%            | Jan - Contractor's Clearing House \$6464.36, National Photocopy IT \$349.80, Finance JCline \$1120, Planning H Hamilton \$1930.67 |
| 660         | 1700        | 205261                | Auditor                                                  | \$ 4,500.00            | \$ -                 | \$ -                    | \$ -                  | 0.00%              |                                                                                                                                   |
| 660         | 1700        | 205262                | Legal Expense                                            | \$ 1,000.00            | \$ 11,663.83         | \$ -                    | \$ 11,663.83          | 1166.38%           |                                                                                                                                   |
| 660         | 1700        | 205270                | Travel                                                   | \$ 1,000.00            | \$ 28.08             | \$ -                    | \$ 28.08              | 2.81%              |                                                                                                                                   |
| 660         | 1700        | 205282                | Software                                                 | \$ 14,500.00           | \$ 199.04            | \$ 5,307.52             | \$ 5,506.56           | 37.98%             |                                                                                                                                   |
| 660         | 1700        | 205311                | Equipment Lease and Rental                               | \$ 3,700.00            | \$ 1,717.02          | \$ 286.17               | \$ 2,003.19           | 54.14%             |                                                                                                                                   |
| 660         | 1700        | 205312                | Equipment Fuel/Tires/Parts                               | \$ 5,000.00            | \$ 2,983.69          | \$ 281.55               | \$ 3,265.24           | 65.30%             |                                                                                                                                   |
| 660         | 1700        | 205313                | Equipment Repair                                         | \$ 1,500.00            | \$ -                 | \$ -                    | \$ -                  | 0.00%              |                                                                                                                                   |
| 660         | 1700        | 205317                | Tools and Small Equipment                                | \$ 4,700.00            | \$ 1,132.18          | \$ -                    | \$ 1,132.18           | 24.09%             |                                                                                                                                   |
| 660         | 1700        | 205330                | Building and Land Maintenance                            | \$ 7,500.00            | \$ -                 | \$ 766.88               | \$ 766.88             | 10.23%             |                                                                                                                                   |
| 660         | 1700        | 205335                | Custodial Support/Supplies                               | \$ 5,800.00            | \$ 1,157.18          | \$ 206.78               | \$ 1,363.96           | 23.52%             |                                                                                                                                   |
| 660         | 1700        | 205342                | Plant Utilities                                          | \$ 25,000.00           | \$ 8,874.44          | \$ 1,815.30             | \$ 10,689.74          | 42.76%             |                                                                                                                                   |
| 660         | 1700        | 205351                | Main Plant Parts                                         | \$ 10,000.00           | \$ 7,374.78          | \$ 351.60               | \$ 7,726.38           | 77.26%             |                                                                                                                                   |
| 660         | 1700        | 205352                | Main Plant Consumables                                   | \$ 9,000.00            | \$ 5,408.53          | \$ 131.45               | \$ 5,539.98           | 61.56%             |                                                                                                                                   |
| 660         | 1700        | 205353                | Main Plant Outside Services                              | \$ 35,000.00           | \$ 31,239.80         | \$ 298.78               | \$ 31,538.58          | 90.11%             |                                                                                                                                   |
| 660         | 1700        | 205361                | Parts                                                    | \$ 50,000.00           | \$ 20,950.31         | \$ 2,349.43             | \$ 23,299.74          | 46.60%             |                                                                                                                                   |
| 660         | 1700        | 205362                | Consumables                                              | \$ 1,000.00            | \$ -                 | \$ -                    | \$ -                  | 0.00%              |                                                                                                                                   |
| 660         | 1700        | 205363                | Outside Services                                         | \$ 10,000.00           | \$ 8,623.78          | \$ 73.00                | \$ 8,696.78           | 86.97%             |                                                                                                                                   |
| 660         | 1700        | 205470                | Equipment Repair/Maintenance                             | \$ 1,000.00            | \$ -                 | \$ -                    | \$ -                  | 0.00%              |                                                                                                                                   |
| 660         | 1700        | 205474                | Mowing                                                   | \$ 9,000.00            | \$ 3,171.00          | \$ -                    | \$ 3,171.00           | 35.23%             |                                                                                                                                   |
| 660         | 1700        | 205475                | Tree Removal/Trimming                                    | \$ 20,000.00           | \$ 2,000.00          | \$ -                    | \$ 2,000.00           | 10.00%             |                                                                                                                                   |
| 660         | 1700        | 208000                | Operating Contingency                                    | \$ 30,000.00           | \$ -                 | \$ -                    | \$ -                  | 0.00%              |                                                                                                                                   |
|             |             |                       | <b>MATERIALS AND SERVICES</b>                            | <b>\$ 343,000.00</b>   | <b>\$ 180,477.93</b> | <b>\$ 23,350.82</b>     | <b>\$ 203,828.75</b>  | <b>59.43%</b>      |                                                                                                                                   |
| 660         | 1700        | 217126                | Transfer out Cap Res                                     | \$ 200,000.00          | \$ 100,000.00        | \$ -                    | \$ 100,000.00         | 50.00%             | Quarterly Transfer to 660-1705                                                                                                    |
| 660         | 1700        | 217136                | Transfer Out Debt Services                               | \$ 43,000.00           | \$ 21,500.00         | \$ -                    | \$ 21,500.00          | 50.00%             | Quarterly Transfer to 155-1200                                                                                                    |
|             |             |                       | <b>TRANSFERS</b>                                         | <b>\$ 243,000.00</b>   | <b>\$ 121,500.00</b> | <b>\$ -</b>             | <b>\$ 121,500.00</b>  | <b>50.00%</b>      |                                                                                                                                   |
|             |             |                       | <b>EXPENSE</b>                                           | <b>\$ 984,100.00</b>   | <b>\$ 442,886.79</b> | <b>\$ 34,174.11</b>     | <b>\$ 477,060.90</b>  | <b>48.48%</b>      |                                                                                                                                   |
|             |             |                       | <b>Revenue Total</b>                                     | <b>\$ 1,161,025.21</b> | <b>\$ 723,389.79</b> | <b>\$ 70,235.14</b>     | <b>\$ 793,624.93</b>  | <b>68.36%</b>      |                                                                                                                                   |
|             |             |                       | <b>Expense Total</b>                                     | <b>\$ 984,100.00</b>   | <b>\$ 442,886.79</b> | <b>\$ 34,174.11</b>     | <b>\$ 477,060.90</b>  | <b>48.48%</b>      |                                                                                                                                   |
|             |             |                       | <b>NET GAIN/(LOSS)</b>                                   | <b>\$ 176,925.21</b>   | <b>\$ 280,503.00</b> | <b>\$ 36,061.03</b>     | <b>\$ 316,564.03</b>  | <b>178.93%</b>     |                                                                                                                                   |

Water Capital Reserve 660-1705

Monthly Financial Detail Report

JANUARY 2023

Printed: 02/13/2023

Period 07-07

Fiscal Year 2023

| Fund | Dept | Account # | Description                    | Budget for Year | Prior Mo Bal    | Current Activity | Actual to Date  | % of Budget | Notes                                                                                    |
|------|------|-----------|--------------------------------|-----------------|-----------------|------------------|-----------------|-------------|------------------------------------------------------------------------------------------|
| 660  | 1705 | 300101    | Beginning Balance              | \$ 1,738,216.63 | \$ 1,738,216.63 | \$ -             | \$ 1,738,216.63 | 100.00%     | Beginning Balance - Unaudited                                                            |
| 660  | 1705 | 301500    | Interest Earned                | \$ 3,500.00     | \$ 6,765.81     | \$ 1,821.69      | \$ 8,587.50     | 245.36%     | LGIP Interest Earned                                                                     |
| 660  | 1705 | 314861    | Transfer in General Reserve    | \$ 150,000.00   | \$ 75,000.00    | \$ -             | \$ 75,000.00    | 50.00%      | Quarterly transfer from 100-1010                                                         |
| 660  | 1705 | 314866    | Urban Renewal Contribution     | \$ 4,000.00     | \$ 2,000.00     | \$ -             | \$ 2,000.00     | 50.00%      | Quarterly transfer from 900-9000                                                         |
| 660  | 1705 | 314875    | Transfer in Water Operations   | \$ 200,000.00   | \$ 100,000.00   | \$ -             | \$ 100,000.00   | 50.00%      | Quarterly transfer from 660-1800                                                         |
|      |      |           | REVENUE                        | \$ 2,095,716.63 | \$ 1,921,982.44 | \$ 1,821.69      | \$ 1,923,804.13 | 91.80%      |                                                                                          |
| 660  | 1705 | 105110    | Water Lead                     | \$ -            | \$ 7,089.49     | \$ 761.83        | \$ 7,851.32     | 0.00%       |                                                                                          |
| 660  | 1705 | 105111    | Wastewater Lead                | \$ -            | \$ 70.71        | \$ -             | \$ 70.71        | 0.00%       |                                                                                          |
| 660  | 1705 | 105112    | Field Utility 2                | \$ -            | \$ 154.49       | \$ -             | \$ 154.49       | 0.00%       |                                                                                          |
| 660  | 1705 | 105113    | Field Utility 1                | \$ -            | \$ 124.91       | \$ -             | \$ 124.91       | 0.00%       |                                                                                          |
| 660  | 1705 | 105114    | Field Utility                  | \$ -            | \$ 121.27       | \$ -             | \$ 121.27       | 0.00%       |                                                                                          |
| 660  | 1705 | 105140    | Fringe Benefits                | \$ -            | \$ 660.32       | \$ 58.95         | \$ 719.27       | 0.00%       |                                                                                          |
| 660  | 1705 | 105141    | Insurance Benefits             | \$ -            | \$ 2,488.87     | \$ 244.59        | \$ 2,733.46     | 0.00%       |                                                                                          |
| 660  | 1705 | 105142    | Regular PERS System            | \$ -            | \$ 1,570.21     | \$ 159.89        | \$ 1,730.10     | 0.00%       |                                                                                          |
| 660  | 1705 | 105150    | Capitalized Labor              | \$ 80,000.00    | \$ -            | \$ -             | \$ -            | 0.00%       |                                                                                          |
|      |      |           | PERSONNEL                      | \$ 80,000.00    | \$ 12,280.27    | \$ 1,225.26      | \$ 13,505.53    | 16.88%      |                                                                                          |
| 660  | 1705 | 407921    | Capital Outlay-Infrastructure  | \$ -            | \$ -            | \$ 778.87        | \$ 778.87       | 0.00%       | Jan - Civil West Engineering, Integrator of Record RFP \$778.87                          |
| 660  | 1705 | 407941    | Capital Outlay - Equipment     | \$ 6,000.00     | \$ -            | \$ -             | \$ -            | 0.00%       |                                                                                          |
| 660  | 1705 | 407948    | Capital Outlay - Water systems | \$ 734,972.00   | \$ 35,718.48    | \$ 5,280.62      | \$ 40,999.10    | 5.58%       | Jan - GSI Water \$4636.25, Westech Engineering \$508.75, Civil West Engineering \$135.62 |
|      |      |           | CAPITAL OUTLAY                 | \$ 740,972.00   | \$ 35,718.48    | \$ 6,059.49      | \$ 41,777.97    | 5.64%       |                                                                                          |
|      |      |           | EXPENSE                        | \$ 820,972.00   | \$ 47,998.75    | \$ 7,284.75      | \$ 55,283.50    | 6.73%       |                                                                                          |
|      |      |           | Revenue Total                  | \$ 2,095,716.63 | \$ 1,921,982.44 | \$ 1,821.69      | \$ 1,923,804.13 | 91.80%      |                                                                                          |
|      |      |           | Expense Total                  | \$ 820,972.00   | \$ 47,998.75    | \$ 7,284.75      | \$ 55,283.50    | 6.73%       |                                                                                          |
|      |      |           | NET GAIN/(LOSS)                | \$ 1,274,744.63 | \$ 1,873,983.69 | \$ (5,463.06)    | \$ 1,868,520.63 | 146.58%     |                                                                                          |

Wastewater Operating 670-1800
Monthly Financial Detail Report
JANUARY 2023

Printed: 02/13/2023
Period 07-07
Fiscal Year 2023

| Fund | Dept | Account Number | Description                    | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes                         |
|------|------|----------------|--------------------------------|-----------------|---------------|------------------|----------------|-------------|-------------------------------|
| 670  | 1800 | 300101         | Beginning Balance              | \$ 229,888.08   | \$ 229,888.08 | \$ -             | \$ 229,888.08  | 100.00%     | Beginning Balance - Unaudited |
| 670  | 1800 | 304310         | Water/Wastewater Services      | \$ 789,000.00   | \$ 403,110.85 | \$ 66,023.01     | \$ 469,133.86  | 59.46%      |                               |
| 670  | 1800 | 304320         | Installation Charges           | \$ 6,000.00     | \$ 1,500.00   | \$ -             | \$ 1,500.00    | 25.00%      |                               |
| 670  | 1800 | 304481         | Grants                         | \$ 38,400.00    | \$ 19,200.00  | \$ -             | \$ 19,200.00   | 50.00%      |                               |
|      |      |                | REVENUE                        | \$ 1,063,288.08 | \$ 653,698.93 | \$ 66,023.01     | \$ 719,721.94  | 67.69%      |                               |
|      |      |                |                                |                 |               |                  |                |             |                               |
| 670  | 1800 | 105101         | City Manager                   | \$ 23,800.00    | \$ 19,007.95  | \$ 1,514.49      | \$ 20,522.44   | 86.23%      |                               |
| 670  | 1800 | 105102         | Deputy Recorder                | \$ -            | \$ 6,242.61   | \$ 517.81        | \$ 6,760.42    | 0.00%       |                               |
| 670  | 1800 | 105104         | City Clerk 2                   | \$ 22,400.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105106         | City Accountant                | \$ 10,400.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105108         | Planner                        | \$ 6,700.00     | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105110         | Water Lead                     | \$ 500.00       | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105111         | Wastewater Lead                | \$ 57,000.00    | \$ 39,269.60  | \$ 3,099.25      | \$ 42,368.85   | 74.33%      |                               |
| 670  | 1800 | 105112         | Field Utility 2                | \$ 18,000.00    | \$ 669.54     | \$ -             | \$ 669.54      | 3.72%       |                               |
| 670  | 1800 | 105113         | Field Utility 1                | \$ 26,700.00    | \$ 11,809.94  | \$ 1,004.41      | \$ 12,814.35   | 47.99%      |                               |
| 670  | 1800 | 105114         | Field Utility                  | \$ 43,000.00    | \$ 20,685.66  | \$ 1,788.43      | \$ 22,474.09   | 52.27%      |                               |
| 670  | 1800 | 105117         | Capital Projects Coordinator   | \$ 11,200.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105118         | Succession Planning w/ License | \$ 26,200.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105119         | Succession Planning EntryLevel | \$ 21,800.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 105140         | Fringe Benefits                | \$ 28,600.00    | \$ 8,356.72   | \$ 612.53        | \$ 8,969.25    | 31.36%      |                               |
| 670  | 1800 | 105141         | Insurance Benefits             | \$ 88,300.00    | \$ 27,123.66  | \$ 2,322.95      | \$ 29,446.61   | 33.35%      |                               |
| 670  | 1800 | 105142         | Regular PERS System            | \$ 42,800.00    | \$ 12,467.85  | \$ 981.13        | \$ 13,448.98   | 31.42%      |                               |
|      |      |                | PERSONNEL                      | \$ 427,400.00   | \$ 145,633.53 | \$ 11,841.00     | \$ 157,474.53  | 36.84%      |                               |
|      |      |                |                                |                 |               |                  |                |             |                               |
| 670  | 1800 | 205210         | Dues & Memberships             | \$ 1,550.00     | \$ 381.66     | \$ 210.00        | \$ 591.66      | 38.17%      |                               |
| 670  | 1800 | 205211         | DEQ Fees                       | \$ 3,100.00     | \$ 3,310.00   | \$ -             | \$ 3,310.00    | 106.77%     |                               |
| 670  | 1800 | 205212         | Fee Expense                    | \$ 7,000.00     | \$ 3,739.13   | \$ 533.07        | \$ 4,272.20    | 61.03%      |                               |
| 670  | 1800 | 205222         | Insurance                      | \$ 14,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
| 670  | 1800 | 205240         | Office Materials & Supplies    | \$ 10,000.00    | \$ 2,383.95   | \$ -             | \$ 2,383.95    | 23.84%      |                               |
| 670  | 1800 | 205241         | Computer Equipment and Maint.  | \$ -            | \$ -          | \$ 1,139.95      | \$ 1,139.95    | 0.00%       |                               |

| Fund | Dept | Account Number | Description                                              | Budget for Year        | Prior Mo Bal         | Current Activity    | Actual to Date       | % of Budget    | Notes                                                                                                                             |
|------|------|----------------|----------------------------------------------------------|------------------------|----------------------|---------------------|----------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 670  | 1800 | 205251         | Telephones/Cell Phones/DSL                               | \$ 6,500.00            | \$ 2,922.00          | \$ 515.85           | \$ 3,437.85          | 52.89%         |                                                                                                                                   |
| 670  | 1800 | 205253         | Postage                                                  | \$ 4,000.00            | \$ 31.44             | \$ 31.45            | \$ 62.89             | 1.57%          |                                                                                                                                   |
| 670  | 1800 | 205255         | Education and Training                                   | \$ 2,000.00            | \$ 2,010.02          | \$ -                | \$ 2,010.02          | 100.50%        |                                                                                                                                   |
| 670  | 1800 | 205260         | Contract Expense (all Professional, IGA & Personal Svcs) | \$ 30,000.00           | \$ 46,669.08         | \$ 9,864.80         | \$ 56,533.88         | 188.45%        | Jan - Contractor's Clearing House \$6464.36, National Photocopy IT \$349.78, Finance Jcline \$1120, Planning H Hamilton \$1930.66 |
| 670  | 1800 | 205261         | Auditor                                                  | \$ 5,000.00            | \$ -                 | \$ -                | \$ -                 | 0.00%          |                                                                                                                                   |
| 670  | 1800 | 205262         | Legal                                                    | \$ 1,000.00            | \$ 11,914.67         | \$ -                | \$ 11,914.67         | 1191.47%       |                                                                                                                                   |
| 670  | 1800 | 205270         | Travel                                                   | \$ 1,000.00            | \$ 28.08             | \$ -                | \$ 28.08             | 2.81%          |                                                                                                                                   |
| 670  | 1800 | 205282         | Software                                                 | \$ 6,500.00            | \$ 199.04            | \$ 5,307.51         | \$ 5,506.55          | 84.72%         |                                                                                                                                   |
| 670  | 1800 | 205311         | Equipment Lease and Rental                               | \$ 3,500.00            | \$ 1,716.96          | \$ 286.16           | \$ 2,003.12          | 57.23%         |                                                                                                                                   |
| 670  | 1800 | 205312         | Equipment Fuel/Tires/Parts                               | \$ 5,000.00            | \$ 3,297.52          | \$ 143.56           | \$ 3,441.08          | 68.82%         |                                                                                                                                   |
| 670  | 1800 | 205313         | Equipment Repair                                         | \$ 6,000.00            | \$ -                 | \$ -                | \$ -                 | 0.00%          |                                                                                                                                   |
| 670  | 1800 | 205317         | Tools and Small Equipment                                | \$ 2,000.00            | \$ 2,079.51          | \$ -                | \$ 2,079.51          | 103.98%        |                                                                                                                                   |
| 670  | 1800 | 205330         | Building and Land Maintenance                            | \$ 4,000.00            | \$ -                 | \$ 460.12           | \$ 460.12            | 11.50%         |                                                                                                                                   |
| 670  | 1800 | 205335         | Custodial Support/Supplies                               | \$ 7,000.00            | \$ 1,764.13          | \$ 261.58           | \$ 2,025.71          | 28.94%         |                                                                                                                                   |
| 670  | 1800 | 205342         | Plant Utilities                                          | \$ 36,000.00           | \$ 11,299.48         | \$ 2,670.52         | \$ 13,970.00         | 38.81%         |                                                                                                                                   |
| 670  | 1800 | 205351         | Main Plant Parts                                         | \$ 11,000.00           | \$ 3,546.88          | \$ -                | \$ 3,546.88          | 32.24%         |                                                                                                                                   |
| 670  | 1800 | 205352         | Main Plant Consumables                                   | \$ 30,000.00           | \$ 18,791.26         | \$ 3,016.18         | \$ 21,807.44         | 72.69%         |                                                                                                                                   |
| 670  | 1800 | 205353         | Main Plant Outside Services                              | \$ 35,000.00           | \$ 8,610.50          | \$ 150.00           | \$ 8,760.50          | 25.03%         |                                                                                                                                   |
| 670  | 1800 | 205361         | Parts                                                    | \$ 2,000.00            | \$ 9,651.40          | \$ -                | \$ 9,651.40          | 482.57%        |                                                                                                                                   |
| 670  | 1800 | 205362         | Consumables                                              | \$ 1,000.00            | \$ 284.85            | \$ 234.92           | \$ 519.77            | 51.98%         |                                                                                                                                   |
| 670  | 1800 | 205363         | Outside Services                                         | \$ 10,000.00           | \$ 10,836.64         | \$ 2,591.00         | \$ 13,427.64         | 134.28%        |                                                                                                                                   |
| 670  | 1800 | 205470         | Equipment Repair/Maintenance                             | \$ 1,500.00            | \$ -                 | \$ -                | \$ -                 | 0.00%          |                                                                                                                                   |
| 670  | 1800 | 205474         | Mowing                                                   | \$ 2,500.00            | \$ 760.00            | \$ -                | \$ 760.00            | 30.40%         |                                                                                                                                   |
| 670  | 1800 | 205475         | Tree Removal/Trimming                                    | \$ 15,000.00           | \$ 2,500.00          | \$ -                | \$ 2,500.00          | 16.67%         |                                                                                                                                   |
| 670  | 1800 | 208000         | Operating Contingency                                    | \$ 25,000.00           | \$ -                 | \$ -                | \$ -                 | 0.00%          |                                                                                                                                   |
|      |      |                | <b>MATERIALS AND SERVICES</b>                            | <b>\$ 288,150.00</b>   | <b>\$ 148,728.20</b> | <b>\$ 27,416.67</b> | <b>\$ 176,144.87</b> | <b>61.13%</b>  |                                                                                                                                   |
| 670  | 1800 | 217126         | Transfer out Cap Res                                     | \$ 200,000.00          | \$ 100,000.00        | \$ -                | \$ 100,000.00        | 50.00%         | Quarterly transfer to 670-1805                                                                                                    |
|      |      |                | <b>TRANSFERS</b>                                         | <b>\$ 200,000.00</b>   | <b>\$ 100,000.00</b> | <b>\$ -</b>         | <b>\$ 100,000.00</b> | <b>50.00%</b>  |                                                                                                                                   |
|      |      |                | <b>EXPENSE</b>                                           | <b>\$ 915,550.00</b>   | <b>\$ 394,361.73</b> | <b>\$ 39,257.67</b> | <b>\$ 433,619.40</b> | <b>47.36%</b>  |                                                                                                                                   |
|      |      |                | <b>Revenue Total</b>                                     | <b>\$ 1,063,288.08</b> | <b>\$ 653,698.93</b> | <b>\$ 66,023.01</b> | <b>\$ 719,721.94</b> | <b>67.69%</b>  |                                                                                                                                   |
|      |      |                | <b>Expense Total</b>                                     | <b>\$ 915,550.00</b>   | <b>\$ 394,361.73</b> | <b>\$ 39,257.67</b> | <b>\$ 433,619.40</b> | <b>47.36%</b>  |                                                                                                                                   |
|      |      |                | <b>NET GAIN/(LOSS)</b>                                   | <b>\$ 147,738.08</b>   | <b>\$ 259,337.20</b> | <b>\$ 26,765.34</b> | <b>\$ 286,102.54</b> | <b>193.66%</b> |                                                                                                                                   |

Wastewater Capital Reserve 670-1805
Monthly Financial Detail Report
JANUARY 2023

Printed: 02/13/2023
Period 07-07
Fiscal Year 2023

| Fund | Dept | Account Number | Description                             | Budget for Year | Prior Mo Bal    | Current Activity | Actual to Date  | % of Budget | Notes                                                                                                                                                                         |
|------|------|----------------|-----------------------------------------|-----------------|-----------------|------------------|-----------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 670  | 1805 | 300101         | Beginning Balance                       | \$ 971,523.44   | \$ 971,523.44   | \$ -             | \$ 971,523.44   | 100.00%     | Beginning Balance - Unaudited                                                                                                                                                 |
| 670  | 1805 | 301500         | Interest Earned                         | \$ 5,000.00     | \$ 9,852.78     | \$ 2,667.83      | \$ 12,520.61    | 250.41%     | LGIP Interest Earned                                                                                                                                                          |
| 670  | 1805 | 314874         | Wastewater Reserve                      | \$ 200,000.00   | \$ 100,000.00   | \$ -             | \$ 100,000.00   | 50.00%      | Wastewater Master Plan - Qtrly Transfer from 670-1800                                                                                                                         |
| 670  | 1805 | 314866         | Urban Renewal Contribution              | \$ 25,000.00    | \$ 12,500.00    | \$ -             | \$ 12,500.00    | 50.00%      | Quarterly transfer from 900-9000                                                                                                                                              |
|      |      |                | REVENUE                                 | \$ 1,201,523.44 | \$ 1,093,876.22 | \$ 2,667.83      | \$ 1,096,544.05 | 91.26%      |                                                                                                                                                                               |
| 670  | 1805 | 105110         | Water Lead                              | \$ -            | \$ 21.16        | \$ -             | \$ 21.16        | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105111         | Wastewater Lead                         | \$ -            | \$ 1,884.13     | \$ 317.42        | \$ 2,201.55     | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105113         | Field Utility 1                         | \$ -            | \$ 49.96        | \$ -             | \$ 49.96        | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105114         | Field Utility                           | \$ -            | \$ -            | \$ 142.79        | \$ 142.79       | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105140         | Fringe Benefits                         | \$ -            | \$ 168.64       | \$ 35.62         | \$ 204.26       | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105141         | Insurance Benefits                      | \$ -            | \$ 605.65       | \$ 122.89        | \$ 728.54       | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105142         | Regular PERS System                     | \$ -            | \$ 287.29       | \$ 53.63         | \$ 340.92       | 0.00%       |                                                                                                                                                                               |
| 670  | 1805 | 105150         | Capitalized Labor                       | \$ 21,000.00    | \$ -            | \$ -             | \$ -            | 0.00%       |                                                                                                                                                                               |
|      |      |                | PERSONNEL                               | \$ 21,000.00    | \$ 3,016.83     | \$ 672.35        | \$ 3,689.18     | 17.57%      |                                                                                                                                                                               |
| 670  | 1805 | 407921         | Capital Outlay - Infrastructure Systems | \$ 188,525.00   | \$ 31,901.10    | \$ 36,176.90     | \$ 68,078.00    | 36.11%      | Jan - Specialty Control \$1800, Civil West Eng \$914.51, Newport Waldport Acq \$310.29, Westech Eng. \$1449.50, RC & H JR LLC \$1587, Legacy (Portable Generator) \$30,115.60 |
| 670  | 1805 | 407941         | Capital Outlay - Equipment              | \$ 60,000.00    | \$ 133,115.60   | \$ -             | \$ 133,115.60   | 221.86%     |                                                                                                                                                                               |
|      |      |                | CAPITAL OUTLAY                          | \$ 248,525.00   | \$ 165,016.70   | \$ 36,176.90     | \$ 201,193.60   | 80.96%      |                                                                                                                                                                               |
|      |      |                | EXPENSE                                 | \$ 269,525.00   | \$ 168,033.53   | \$ 36,849.25     | \$ 204,882.78   | 76.02%      |                                                                                                                                                                               |
|      |      |                | Revenue Total                           | \$ 1,201,523.44 | \$ 1,093,876.22 | \$ 2,667.83      | \$ 1,096,544.05 | 91.26%      |                                                                                                                                                                               |
|      |      |                | Expense Total                           | \$ 269,525.00   | \$ 168,033.53   | \$ 36,849.25     | \$ 204,882.78   | 76.02%      |                                                                                                                                                                               |
|      |      |                | NET GAIN/(LOSS)                         | \$ 931,998.44   | \$ 925,842.69   | \$ (34,181.42)   | \$ 891,661.27   | 95.67%      |                                                                                                                                                                               |

SDC-Admin 160-1605

Monthly Financial Detail Report

JANUARY 2023

Printed: 02/13/2023

Period 07-07

Fiscal Year 2023

| Fund | Dept | Account Number | Description                  | Budget for Year | Prior Mo Bal  | Current Activity | Actual to Date | % of Budget | Notes                         |
|------|------|----------------|------------------------------|-----------------|---------------|------------------|----------------|-------------|-------------------------------|
| 160  | 1605 | 300101         | Beginning Fund Balance       | \$ 740,400.98   | \$ 740,400.98 | \$ -             | \$ 740,400.98  | 100.00%     | Beginning Balance - Unaudited |
| 160  | 1605 | 301500         | Interest Earned              | \$ 4,100.00     | \$ 4,809.26   | \$ 1,292.68      | \$ 6,101.94    | 148.83%     | LGIP Interest                 |
| 160  | 1605 | 304341         | SDC Water Improvements       | \$ 25,791.00    | \$ 8,551.95   | \$ -             | \$ 8,551.95    | 33.16%      |                               |
| 160  | 1605 | 304342         | SDC Water Reimbursements     | \$ 13,000.00    | \$ 5,299.99   | \$ -             | \$ 5,299.99    | 40.77%      |                               |
| 160  | 1605 | 304343         | SDC Wastewater Reimbursement | \$ 40,000.00    | \$ 14,118.35  | \$ -             | \$ 14,118.35   | 35.30%      |                               |
| 160  | 1605 | 304344         | SDC Storm Drain Improvement  | \$ 15,000.00    | \$ 4,174.56   | \$ -             | \$ 4,174.56    | 27.83%      |                               |
| 160  | 1605 | 304435         | LID Assessments              | \$ 7,700.00     | \$ 10,820.71  | \$ -             | \$ 10,820.71   | 140.53%     |                               |
|      |      |                | REVENUE                      | \$ 845,991.98   | \$ 788,175.80 | \$ 1,292.68      | \$ 789,468.48  | 93.32%      |                               |
| 160  | 1605 | 217126         | Transfer out Cap Res         | \$ 50,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
|      |      |                | TRANSFERS                    | \$ 50,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
|      |      |                |                              | \$ 50,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
|      |      |                | EXPENSE                      |                 |               |                  |                |             |                               |
|      |      |                |                              | \$ 845,991.98   | \$ 788,175.80 | \$ 1,292.68      | \$ 789,468.48  | 93.32%      |                               |
|      |      |                | Revenue Total                | \$ 50,000.00    | \$ -          | \$ -             | \$ -           | 0.00%       |                               |
|      |      |                | Expense Total                |                 |               |                  |                |             |                               |
|      |      |                |                              | \$ 795,991.98   | \$ 788,175.80 | \$ 1,292.68      | \$ 789,468.48  | 99.18%      |                               |
|      |      |                | NET GAIN/(LOSS)              |                 |               |                  |                |             |                               |

**City of Yachats  
Public Works and Streets Commission  
Summary Minutes  
February 14, 2023**

Audience/Guests: 7

1. Chair West called the meeting to order at 2:01pm. Present: Kevin Erdahl, Alex Cox, Linn West, Bob Bennett, Don Groth and Don Phipps. Staff: Kimmie Jackson, Recorder, David Buckwald, Wastewater Lead, Rick McClung, Water Lead.

2. (00:33) Announcements/Correspondence: The Planning Commission would like to have a meeting in conjunction on the Parking Study, implementing requirements, and then will submit to the City Council for recommendation.

Announced that there is a need for one Commission member at this time. There is some interest if the person is a resident. Will need to see where they are registered to vote and that will determine if they meet one of the qualification.

3. (05:02) Public Comment: None

4. (05:40) Public Work Report is attached to the online packet. After reviewing the information, it was mentions that Public Works treated ten million gallons; repaired a 2" water main break on Greenhill, replaced a 2" water meter and worked on storm cleanup around town.

5. (08:00) McClung, Water Lead sent out a report to the Commission members this morning that Southwest Lincoln Water District (SWLWD) is ready to start talking to Council regarding becoming a permanent customer. SWLWD did an amendment to their Water Master Plan to demonstrate how much water that they can continuously give to Yachats forever. It was reported that they can give up to three hundred gallon per minute. They will need help with their infrastructure to provide that water; their plant will need to add a third module to their system and costs approximately a million and a half dollars. Discussion continued regarding the City's options and to keep in mind that the City will not need the Mid-Coast Water Partnership. The ultimate cost for this to happen could be several million dollars. One concern for the City are the droughts it has experienced in the past, and the possibility for the need to get water in these times.

Discussion continued around the financing of this project, the benefits for SWLWD and the City, and the objective is for Public Works & Streets to pass this item on to the City Manager and City Council.

(27:00) Motion was made to recommend to the City Manager and City Council that Public Works & Streets approve of this approach that has been outlined in this Water Report and begin negotiations to hook up to their water system. The vote was called, all are in favor and passed unanimously.

6. (28:05) E. 2<sup>nd</sup> Street is out to bid and will be opening bids on March 21<sup>st</sup>.
7. (33:27) The Seismic Valve and Back Wash: Installed the new valve and the earthquake controls are on order. Will be starting the Backwash in March and should finish just when the 2<sup>nd</sup> Street starts.
8. (35:07) The Finance Report is attached to the online packet and was reviewed by this Commission.
9. (56:47) Emergency Preparedness Committee reported that they have decided to remain a Committee; Inventoried both Conex's; laid mouse traps; will be requesting funds to equal out the Conex's contents, add to them and to proceed with the third Conex at the fire department; CPR classes are being offered by contacting Will at Fire Department directly, the cost is \$20.00, you will received a certificate and this is a two-and-a-half-hour class.
10. (58:55) Water Conservation Study is done and will present that at the next meeting.
11. (59:20) Sustainable Water Plan and Water Rates presentation was given by Greg Scott, Resident of Quiet Water. Mr. Scott presented a plan in his opinion for a sustainable water system and a new water supply and is attached to the online packet. In his opinion the water is gradually drying out; there are funding options from the State of Oregon; has been meeting with SWLWD and with City Staff and is basically in line with Public Works Lead McClung input. The City is not in crisis, but developing a relationship and putting finances in place, possible Levy options; this is in addition and not to replace our system. The billing system and structure will also be a factor and how much the City will have to pay for these changes. Public Works will continue discussions moving forward.
12. (1:34:59) Hwy 101 Delineators, no update at this time. Commission members went out and walked the dangerous curved area on Hwy 101 and measured, made a diagram with measurements in the critical areas, are asking for an alternate delineator, taking into account in a short span about 140 feet. ADA regulations by cutting down their 4-foot requirement to 3.6 feet. ADA Code require 3 feet, ODOT increased that dimension for their own use. We are asking for consideration and is taking it to their engineer in hopes to pursue the project.

1 13.(1:40:25) Public Works Standards: Budgeting for 2023-24 to work on the  
2 standards; include Planning Commission in terms of standards for parking, using  
3 gravel or other surfaces to create areas for parking. The standards are different  
4 for the West side of 101 and East side of Hwy 101 for street development.  
5

6 14.(1:42:00) CIP: Public Works staff is working with the CIP Coordinator and is in  
7 progress and almost completed and should be ready for a presentation at the  
8 next meeting.  
9

10 15.(1:42:55) Street Lighting: Chair West did have a conversation with Central  
11 Lincoln PUD and received limited information and will continue to research. City  
12 has document that identifies where the streetlights are and the types. The  
13 streetlights are owned by the City, but there is no documentation as to why they  
14 were placed where they are. The City does not have a policy and research will  
15 need to be done before any altering of the lights. PUD are putting in LED's when  
16 they go out, and it has been reported that it seems it's creating more light, At this  
17 point the Commission will not be pursuing this issue at this time until more  
18 research is done.  
19

20 16.(1:50:06) Goals were not on this agenda. The Chair encouraged the members to  
21 come up with goals that will support the projects and forward to Chair to compile  
22 for the next meeting.  
23

24 17.(1:53:24) Speed Limit Enforcement: Member Phipps is in touch with the Sheriff  
25 that patrols our City. The City Manager of Waldport suggested that Yachats  
26 consider a budget for policing this area. It was suggested to Member Phipps to  
27 attend the Community Engagement Meetings that the City Manager has each  
28 month and bring up the topic.

29 No further business to discuss, meeting adjourned by West at 4:02pm.  
30

31 Next Meeting: Tuesday, March 14, 2023, at 4:00pm

32 Prepared by Kimmie Jackson Deputy Recorder on February 17, 2023.



## TECHNICAL MEMORANDUM

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### Ordinances Encouraging Water Conservation

**To:** Rick McClung, City of Yachats

**From:** Suzanne de Szoeki, GSI Water Solutions, Inc.  
Leah Cogan, GSI Water Solutions, Inc.

**Attachments:** Appendix A – Table of Water Conservation Ordinance Examples

**Date:** January 31, 2023

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### Introduction

In September 2021, the Oregon Health Authority (OHA) and Oregon Department of Environmental Quality (DEQ) approved the City of Yachats (City) Drinking Water Protection Plan (DWPP) to safeguard the City's municipal water sources. A team of local stakeholders and technical experts developed the DWPP with public input. The DWPP assesses potential risks to drinking water arising in the watersheds of the City's water sources, Reedy Creek and Salmon Creek, and sets forth strategies to address those risks. Among these strategies, the DWPP recommends that the City consider adopting ordinances promoting water conservation to reduce demand on the water quantity of the City's water sources and to protect water quality in those sources from deteriorating during low flows.

To assist the City in implementing the DWPP and achieving its water conservation goals, GSI Water Solutions, Inc. (GSI) has prepared this technical memorandum describing opportunities to encourage water conservation in the City's Municipal Code. For this memo, GSI examined the relevant sections of municipal, development, and land use codes for cities with effective water conservation policies, primarily in the western United States. The primary data sources explored were the [Municode Library](#) (an online database of municipal codes) and city and state websites. This memo provides a brief background and then describes common themes in indoor and outdoor water conservation policies, including considerations for short-term rentals. Examples of ordinance concepts and language are provided, and **Appendix A** includes a more extensive table of ordinance excerpts from various cities with links to the associated code. Each example referenced in this memo is numbered to correspond with the table.

### Background

Municipal water demand typically shows a seasonal pattern of increased water usage in the summer and decreased usage during the winter, leading many cities to target summer water use for conservation programs. Spikes in demand during the summer "peak season" months may be attributed to increases in the outdoor use of water for lawn and landscape irrigation, indoor water use to serve a higher tourist population, or both. Total water demand in Yachats follows this seasonal pattern, but specific data on consumption by customer category was not available to help distinguish the precise factors behind the increased summer water use. Instead, GSI examined water use by customer category in nearby communities to understand local trends. Residential customer water usage in the summer in Florence and Waldport are approximately double the winter usage, which is likely a combination of increased landscape irrigation and short-term rental occupancy. Summer increases in commercial water use, likely linked to tourism, are apparent in both cities,

with a stronger trend in Florence. Irrigation customer accounts in Florence (outdoor use only, with no connection to the wastewater system) show significant water use from about May to October.

The Implementation Plan in the DWPP describes approaches to using ordinances to encourage both indoor and outdoor water conservation to address these potential causes of high water use in Yachats. As part of the DWPP implementation process, GSI has assisted the City with conducting water conservation ordinance research and facilitating community engagement in the development of proposed ordinances. Public meetings were held on September 19 and November 14, 2022, to provide opportunities for public input on proposed ordinance concepts. Feedback received from community members showed support for a greater focus on indoor conservation policies, including those targeting short-term rentals. Community members indicated that outdoor conservation actions may have a smaller impact due to the limited use of irrigation systems in the area. This memo takes this feedback into account when evaluating ordinance concepts and presenting recommendations.

### Indoor Water Conservation

New construction must comply with relevant building codes, so newer buildings are usually more water-efficient than older buildings. The DWPP suggests focusing indoor water conservation efforts on older homes and businesses where water savings would be more significant. In practice, inspections to enforce building codes typically only occur during initial permitting and construction phase of development projects. Additional opportunities to require water efficiency improvements could arise during remodels, resale, or permitting a residence as a short-term rental. Requiring applicable remodels to meet water efficiency criteria is more common than requiring retrofits upon resale, which can be unpopular due to the added expense to the property owner when selling the building. While improving indoor water efficiency in existing buildings through these means may be a longer-term process, the water savings can be substantial and should not be overlooked.

### Water-Efficient Fixture Flow Rates

Specifying the maximum allowable flow rates of indoor plumbing fixtures can promote water conservation by requiring the use of efficient fixtures. For new development in Yachats, building permit applications involve a joint review by the City and Lincoln County. The City reviews certain aspects of the applications, such as confirming water and sewer availability, while Lincoln County reviews aspects such as plumbing and conducts all site inspections. Therefore, any proposed code changes affecting plumbing requirements or inspections would require coordination with Lincoln County to adjust permit review and inspection procedures.

The State of Oregon Plumbing Specialty Code designates the maximum flow rates for plumbing fixtures in new construction (Oregon Building Codes Division, 2021). In many cases, the Oregon code is equivalent to the federal EPA WaterSense program, which provides another common standard for certifying water-efficient products (US Environmental Protection Agency, 2022). Although both the Oregon plumbing code and the WaterSense specifications are substantially more efficient than older fixtures, there are readily available fixtures capable of even greater potential water efficiency. **Tables 1 and 2** present a comparison of maximum flow rates for various fixtures for residential and commercial buildings, respectively. Since both commercial and residential (including short-term rental) customers likely contribute to high summer water use, targeting both categories for water conservation would be appropriate. Community members also expressed a desire to ensure that City-owned facilities meet the same standards as commercial properties.

**Table 1. Maximum Residential Fixture Flow Rates**

| Fixture          | OR Code  | EPA WaterSense | Potential Efficiency |
|------------------|----------|----------------|----------------------|
| Showerheads      | 2.0 gpm  | 2.0 gpm        | 1.25-1.5 gpm         |
| Toilets          | 1.28 gpf | 1.28 gpf       | 1.28/0.8 gpf**       |
| Bathroom faucets | 1.5 gpm  | 1.5 gpm        | 0.5-1.0 gpm          |
| Kitchen faucets  | 1.8 gpm  | *              | 1.5 gpm              |

gpm = gallons per minute; gpf = gallons per flush

\* No EPA WaterSense specification has been developed for kitchen faucets.

\*\* Gallons per flush for dual flush toilet models.

**Table 2. Maximum Commercial Fixture Flow Rates**

| Fixture                | OR Code  | EPA WaterSense | Potential Efficiency |
|------------------------|----------|----------------|----------------------|
| Showerheads            | 2.0 gpm  | 2.0 gpm        | 1.25-1.5 gpm         |
| Toilets                | 1.28 gpf | 1.28 gpf       | 1.28/0.8 gpf**       |
| Urinals                | 0.5 gpf  | 0.5 gpf        | 0.5 gpf              |
| Bathroom faucets       | 0.5 gpm  | *              | 0.5 gpm              |
| Pre-rinse spray valves | 1.6 gpm  | 1.0-1.28 gpm   | 1.0-1.28 gpm         |

gpm = gallons per minute; gpf = gallons per flush

\* No EPA WaterSense specification has been developed for commercial bathroom faucets.

\*\* Gallons per flush for dual flush toilet models.

Although it does not appear very common for cities in Oregon to adopt ordinances specifying the maximum flow rates for fixtures, policies in other states may designate flow rates or require the use of WaterSense-labeled fixtures (see Appendix A, Examples 1-6). The City could provide its own table of water efficiency standards to be met, or could consider language such as:

**All new construction and applicable remodels shall have fixtures that meet or exceed the water efficiency standards for maximum flow rates in the State of Oregon Plumbing Specialty Code or the most current EPA WaterSense product specification standards, whichever is more restrictive.**

The City could consider requiring certain appliances to meet Energy Star standards when being installed in new construction or remodels. The Energy Star program provides certifications for energy-efficient appliances, many of which are also significantly more water-efficient than standard models (US Environmental Protection Agency and US Department of Energy, 2022). This includes residential and commercial clothes washers, residential and commercial dishwashers, commercial ice makers, commercial steam cookers, and residential and commercial water heaters.

The water savings potential of fixture upgrades could also be factored into the City's decision of which water fixtures to address in ordinances. A recent study on the cost-effectiveness of upgrading existing fixtures and appliances to more water-efficient models found that showerheads and clothes washers were among the most impactful in residential settings, while the most valuable upgrades in commercial settings came from showerheads, pre-rinse spray valves, food steamers, ice machines, clothes washers (replacing top-loading with front-loading models), and faucet aerators (Cooley & Phurisamban, 2018). Upgrading residential toilets to efficient models using 1.28 gpf can reduce the water used by 20 percent when converting from a 1.6 gpf model or 60 percent converting from a 3.5 gpf model. Installing bathroom faucet aerators can produce 55

percent water savings when replacing a 2.2 gpm model with a 1.0 gpm model. In commercial kitchen settings, switching to pre-rinse spray valves that use 1.15 gpm or lower flow rates can achieve 77 percent water savings when converting from a 5.0 gpm model or 54 percent when converting from a 2.5 gpm model. The City could choose to target the most high-impact devices to increase the effectiveness of any new ordinance proposed. In addition to considering ordinances for new construction and remodels, the City could expand the reach of these water conservation efforts to existing buildings by providing free high-impact conservation items to customers or exploring rebate programs for larger fixtures and appliances, potentially in collaboration with the Mid-Coast Water Conservation Consortium.

### Short-Term Rentals

Yachats Municipal Code Chapter 4.08 describes the requirements for licensing vacation rentals. The City allows for a total of 125 licenses, which can be renewed annually. An inspection is required prior to initially granting a license and every 5 years thereafter if the license continues to be renewed. Properties must meet requirements for parking, trash, occupancy limits, and similar factors related to health and safety, but there is currently no requirement related to water use efficiency. The licensing and inspection process presents an opportunity to include additional requirements for water-efficient plumbing fixtures that could be phased in gradually as existing properties renew their licenses and new properties enter the program. Another potential method of reducing water use at short-term rental properties would be to require posting of water conservation outreach materials to provide information about the City's water resources and encourage visitors to be mindful of their water use.

### Conservation During Water Shortages

Actions to be taken during various stages of water shortages are outlined in Chapter 8.22 of the Yachats Municipal Code and are included in the curtailment section of the City's Water Management and Conservation Plan. There are 4 phases of shortages defined, with Phases 1-3 being increasing levels of drought or low flows in the City's water sources and Phase 4 being a sudden disaster or catastrophic interruption of the water supply. A Phase 3 water shortage requires very restrictive water conservation measures, including a requirement that all "commercial large meter" customers (1.5 inches or larger meter) send linens for laundering outside the City, with an exemption for commercial laundromats. Community members attending the public meetings expressed concern that the lack of options for commercial laundering would completely prevent them from operating if a Phase 3 water shortage were declared. Commenters noted that many businesses subject to the rule already take other measures to reduce their water use, such as planting native landscaping that does not require any irrigation. Business owners offered suggestions for meeting water conservation goals while still allowing in-house laundering, such as providing an exemption for customers that demonstrate efficient use of water. If the City is interested in modifying this provision, one recommendation would be to require the use of Energy Star certified front load clothes washers, which use 50 percent less water than a standard top load agitator washer (US Environmental Protection Agency and US Department of Energy, 2022).

### Outdoor Water Conservation

As described previously, details on outdoor water use in Yachats are limited, and community feedback indicated that lawn and landscape irrigation is probably a more minor contributor to increased summer water use compared to the effects of tourism. Since extensive lawn watering and in-ground irrigation systems do not appear to be prevalent in the community, ordinances targeting irrigation system design or turf area restrictions appeared less likely to produce immediate water savings than indoor water conservation ordinances. Nonetheless, having outdoor ordinances in place may be beneficial for addressing any poor outdoor water management practices that may exist in the community currently or that may arise in the coming years as a result of climate change impacts on local precipitation.

Common outdoor ordinances in municipal codes focus on fundamental principles of preventing water waste and optimizing the timing of watering. The City's municipal code does not currently include specific provisions prohibiting runoff caused by excessive irrigation or overspray of sprinklers onto areas not intended to be irrigated. Several municipalities have adopted this type of ordinance in order to create an enforceable provision against water waste (see Appendix A, Examples 7-11). The City could consider modifying Section 5.08.140 of the municipal code, which already prohibits runoff of stormwater, to include runoff of landscape irrigation water:

**The owner or person in charge of property shall design irrigation systems to minimize overspray to non-irrigated areas.**

**Water runoff leaving the landscape area due to excessive irrigation or overspray where water flows onto adjacent property, roadways, parking lots, or other non-irrigated areas is prohibited.**

Another potential opportunity to prevent water waste is to restrict irrigation during the warmest hours of the day, when water is more likely to evaporate. Currently, Section 8.22 of the City's municipal code prohibits irrigation between the hours of 10:00 a.m. and 7:00 p.m. when a Phase 1 water shortage has been declared, and this regulation remains in effect through any subsequent phases of water shortage that are declared. Other communities have similar restrictions in place regardless of whether a water shortage is in effect, which improves overall outdoor water use efficiency (see Appendix A, Examples 12-15). The City could therefore consider expanding its time-of-day restrictions to be in place permanently.

Although outdoor water use may not currently be very high, the Risk Assessment section of the DWPP notes that one of the projected impacts of climate change in the Pacific Northwest is reduced summer rainfall, which could increase the prevalence of lawn and landscape irrigation in the future. Therefore, it may be prudent for the City to analyze data on water use trends when available and consider implementing outdoor water conservation ordinances if needed. Common themes among outdoor ordinances include plant selection, irrigation system efficiency, and landscape design. Criteria for these elements could be integrated into development permit applications that require approval of a site plan, which would entail coordination of the permitting process with Lincoln County.

Ordinances related to landscaping plant selection range from encouragement of low water use, native, and drought-tolerant plant species to mandates that plants be selected from a pre-approved list (see Appendix A, Examples 16-19). Irrigation systems can be tailored to increase efficiency by methods such as requiring automatic irrigation controllers to limit unnecessary watering or requiring drip systems on steep slopes to prevent erosion (see Appendix A, Examples 20-22). Incorporating water-wise landscape design requirements into site development plans is a proactive way to reduce the outdoor water use of proposed new developments. Common features of this type of ordinance include restrictions on the landscape area that can be planted with turf and high water use plants or have water features like fountains and ponds (see Appendix A, Examples 23-26).

Members of the DWPP development team and comments received at public meetings showed support for the use of alternative sources of irrigation water such as gray water or stormwater captured in rain barrels or directed into rain gardens. Although it appears rare for municipalities to make this mandatory, there are examples of communities encouraging or promoting alternative sources through either ordinances or as part of their water conservation outreach programming (see Appendix A, Examples 27-28). Similarly, outreach and education could be used to encourage water-wise landscape design, low impact development, and permeable surfaces.

## Conclusion

Many communities use ordinances to protect their drinking water supplies by promoting indoor and outdoor water conservation and prohibiting water waste. Leaving more water instream also protects water quality in the water sources, since low flows can concentrate pollutants and exacerbate problems with turbidity. The primary recommended types of ordinances include:

- Require that indoor plumbing fixtures meet or exceed specified efficient flow rates
- Integrate water efficiency requirements into the short-term rental licensing process
- Prohibit excessive landscape irrigation that causes runoff to leave the irrigated area
- Prohibit watering between 10:00 a.m. and 7:00 p.m., regardless of whether a water shortage is in effect
- Consider whether additional outdoor water conservation ordinances are warranted

Ordinances can be combined with other conservation efforts, such as public outreach, demonstration gardens, free water conservation items or rebate programs, and water rates that are tiered or otherwise structured to encourage customers to limit their water use. Through the City's participation in the Mid-Coast Water Conservation Consortium, the City already has access to outreach materials and bulk purchases of conservation items such as low water use showerheads and faucet aerators, which are two of the most cost-effective conservation fixtures. Developing or participating in a rebate program for clothes washers (including commercial models), pre-rinse spray valves, food steamers, and ice machines could produce substantial water savings, particularly for tourism-related summer water use in the commercial customer category. To reduce outdoor water use, outreach on low water use gardening could be combined with ordinances prohibiting wasteful practices such as excessive irrigation, overspray, and watering in the middle of the day. Metering faucets, foot- or knee-activated faucets, and efficient water heater systems could be areas for future research.

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## Appendix A

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### Table of Water Conservation Ordinance Examples



## Examples of Water Conservation Policies in Municipal Codes

| City                       | Category        | Code Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Code Reference                                     | Example # |
|----------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------|
| Burlingame, CA             | Indoor Fixtures | All new construction and applicable remodels will have, at a minimum, fixtures that comply with the efficiency standards listed in the Indoor Water Use Efficiency Table. [Note: the standards shown are substantially equivalent to WaterSense and State of Oregon requirements]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Municipal Code 18.19.050</a>           | 1         |
| Illinois (model ordinance) | Indoor Fixtures | Plumbing fixtures in all new and rehabbed construction shall not exceed the following flow rates and must be a labeled WaterSense fixture. The residential section of this ordinance applies to single family homes, townhomes and multifamily units (i.e. condos, apartments, etc.).<br>Retrofit on Resale. All residential property owners, prior to change of ownership, must certify that the structure has high efficiency plumbing fixtures (toilets, faucets, and showerheads) as defined in Section 1.0 Plumbing Fixtures in this ordinance. This applies to all residential property built prior to January 1, 1994. The Municipality may waive the requirements in Section 3.0 based on certain household characteristics such as extreme economic hardship, historical landmark designation, transfers within a family, foreclosures, eminent domain, teardowns, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Model Ordinance</a>                    | 2         |
| Illinois (model ordinance) | Indoor Fixtures | The following flow rates shall at a minimum maintain alignment with the most current EPA WaterSense product specification standards for all fixtures listed below. No water closet shall have a flush volume greater than 1.6 gallons per flush. The maximum water factor for residential dishwashers shall be 5.8 and be EPA Energy Star rated. Residential clothes washers shall comply with the EPA Energy Star program requirements and shall have a water factor of 5.0 or less. The maximum flow rate for lavatory faucets shall be 1.5 gallons per minute at 60 psi. The maximum flow rate for showerheads shall be 2.0 gallons per minute at 80 psi. [Note: This document was developed in 2009. EPA WaterSense standards and Oregon Plumbing Specialty Code may now have stricter requirements.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <a href="#">Model Ordinance</a>                    | 3         |
| Nevada (state code)        | Indoor Fixtures | Except as otherwise provided in subsection 6, each residential, commercial or industrial structure on which construction begins on or after January 1, 2020, and each existing residential, commercial or industrial structure which is expanded or renovated on or after January 1, 2020:<br>(a) If the WaterSense program established by the United States Environmental Protection Agency has developed a final product specification for a type of toilet, shower apparatus, urinal or faucet, must not install any toilet, shower apparatus, urinal or faucet that has not been certified under the WaterSense program.<br>(b) If the WaterSense program has not developed a final product specification for a type of toilet, shower apparatus, urinal or faucet, must not install any toilet, shower apparatus, urinal or faucet that does not comply with any applicable requirements of federal law and the building code of the county or city.<br>If the WaterSense program modifies the requirements for a plumbing fixture to be certified under the WaterSense program, a plumbing fixture that was certified under the previous requirements shall be deemed certified for use under the WaterSense program for a period of 12 months following the modification of the requirements for certification. | <a href="#">NRS 278.582</a>                        | 4         |
| New York City, NY          | Indoor Fixtures | Showerheads, private lavatory faucets, water closets and for urinals, the urinal flush valve or fixture/valve combination, shall meet the specifications required for the WaterSense program label and shall bear such label, or shall be approved in accordance with this code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Plumbing Code 604.4.1</a>              | 5         |
| Santa Cruz, CA             | Indoor Fixtures | All existing residential, commercial, and industrial buildings shall, at the time of sale, be retrofitted, if not already so, exclusively with high efficiency plumbing fixtures.<br>“High efficiency plumbing fixtures” means any fixture that is designated as an USEPA WaterSense fixture; or any showerhead rated to use a maximum of 2.0 gallons of water per minute, any high efficiency toilet rated to use a maximum of 1.28 gallons of water per flush, and any urinal and associated flush valve rated to use a maximum of 0.5 gallons of water per flush.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <a href="#">Chapter 16.03.040</a>                  | 6         |
| Ashland, OR                | Water Waste     | Design irrigation systems to minimize runoff and overspray to non-irrigated areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <a href="#">Land Use Ordinance 18.4.4.030.I.2</a>  | 7         |
| Roseville, CA              | Water Waste     | The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <a href="#">Municipal Code 14.18</a>               | 8         |
| San Francisco, CA          | Water Waste     | Water runoff leaving the landscape area due to low head drainage, overspray, broken irrigation hardware, or other similar conditions where water flows onto adjacent property, walks, roadways, parking lots, structures, or non-irrigated areas designated for non-development such as open spaces and existing native vegetation, is prohibited.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <a href="#">Administrative Code 63.7</a>           | 9         |
| Santa Fe, NM               | Water Waste     | Irrigation systems shall be designed to prevent water waste, over-watering and overspray or drainage of water onto any paved or unplanted surface.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <a href="#">Land Development Code 14-8.4(E)(4)</a> | 10        |
| Bend, OR                   | Water Waste     | Water that travels beyond the property line is considered water waste. Allowing water to flow onto adjoining properties due to poorly designed, maintained or adjusted irrigation systems that allow water to be applied beyond intended irrigated areas or spray or run off onto adjoining walls or fences is prohibited.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <a href="#">Municipal Code 14.20.030.A.2</a>       | 11        |
| Cupertino, CA              | Time of Day     | Irrigation is limited to between 8:00 pm and 10:00 am, unless unfavorable weather prevents it or renders irrigation unnecessary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Municipal Code 14.15.050</a>           | 12        |
| Roseville, CA              | Time of Day     | Overhead irrigation using potable water shall be scheduled between 8:00 p.m. and 10:00 a.m. unless it is demonstrated that weather conditions are unfavorable or would result in detriment to plant health.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <a href="#">Municipal Code 14.18</a>               | 13        |

| City             | Category                  | Code Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Code Reference                                                            | Example # |
|------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------|
| Bend, OR         | Time of Day               | Irrigation is not allowed between the hours of 9:00 a.m. and 5:00 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <a href="#">Municipal Code 14.20.050.B</a>                                | 14        |
| Prineville, OR   | Time of Day               | Between April 15 and October 15 of each year, users of city water for irrigation shall comply with the following restrictions: Irrigation shall be permitted before 10:00 a.m. and after 4:00 p.m. but shall be prohibited in the hours between.                                                                                                                                                                                                                                                                                                                                                                                               | <a href="#">Municipal Code 52.020(A)(1)</a>                               | 15        |
| Coos Bay, OR     | Plant Selection           | Landscape materials should be selected and sited to produce a hardy and drought-resistant landscape area. Selection should include consideration of soil type and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, compatibility with existing native vegetation preserved on the site, water conservation where needed, and the impact of landscaping on visibility of the site for purposes of public safety and surveillance. Landscaping materials shall be selected in accordance with a list of plant materials adopted by reference as the Sunset Western Garden Book. | <a href="#">Supp. Development Standards, Chapter 17.335</a>               | 16        |
| Lincoln City, OR | Plant Selection           | Use of native and drought-tolerant species is advised generally, and required in subsection (G)(1) of this section for shrubs and perennials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <a href="#">Supp. Regs. Chapter 17.52</a>                                 | 17        |
| Ontario, OR      | Plant Selection           | Plant species that do not require irrigation once established (drought tolerant) are preferred over species including grass lawn that require irrigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Planning &amp; Zoning Development Standards 10A-57-55.4.b</a> | 18        |
| Santa Cruz, CA   | Plant Selection           | Turf varieties shall be water-conserving species, such as tall and hard fescues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <a href="#">Municipal Code 16.16.070(c)(3)</a>                            | 19        |
| Ashland, OR      | Irrigation Systems        | Equip all irrigation systems with a controller capable of dual or multiple programming. Controllers shall have a multiple start time capability, station run times in minutes to hours, and water days by interval, day of the week, and even/odd days.<br>Use controllers with a percent adjust (water budget) feature, or the capability of accepting an external rain or soil moisture sensor.<br>Use sprinkler heads with a precipitation rate of .85 inches per hour or less on slopes exceeding 15 percent to minimize run-off, or when slope exceeds ten percent within ten feet of hardscape.                                          | <a href="#">Land Use Ordinance 18.4.4.030.I.2</a>                         | 20        |
| Cupertino, CA    | Irrigation Systems        | Automatic irrigation controllers are required for irrigation scheduling, utilizing evapotranspiration or soil moisture sensor data. Separate valves are required for each hydrozone. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers and turf. Low-volume irrigation is required in mulched areas, areas with slope >25%, within 24 inches of a non-permeable surface, and in any narrow or irregularly shaped areas that are less than eight (8) feet in width in any direction.                                                                                                                           | <a href="#">Municipal Code 14.15.050</a>                                  | 21        |
| Roseville, CA    | Irrigation Systems        | Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required for irrigation scheduling in all irrigation systems. For single-family residential properties, controller shall have a minimum of eight stations or be upgradable to eight stations or more.                                                                                                                                                                                                                                                                                                 | <a href="#">Municipal Code 14.18</a>                                      | 22        |
| Ashland, OR      | Landscape Design          | Limit combined natural turf or water areas (i.e., pools, ponds, and fountains) to 20 percent of the landscaped areas. These limitations do not apply to parks, common open space, golf courses, cemeteries, and school recreation areas.                                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Land Use Ordinance 18.4.4.030.I.1.e</a>                       | 23        |
| Phoenix, AZ      | Landscape Design          | No more than 50% of the landscaped area at maturity or 10% of the net lot area, whichever is less, should be planted in turf or high water use plants. Functional turf areas such as in parks, schools, multiple-family and single-family common areas, individual single-family lot, and golf courses are exempt.                                                                                                                                                                                                                                                                                                                             | <a href="#">Zoning Ordinance 507.A.II.A.3.1.13</a>                        | 24        |
| Reno, NV         | Landscape Design          | In multi-family, mixed-use, or nonresidential districts, or model homes, lawn or turf areas shall not exceed 50 percent of the required landscape area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <a href="#">Land Development Code 18.04.806.c</a>                         | 25        |
| Santa Cruz, CA   | Landscape Design          | The combined size of turf and areas devoted to high water use plants, decorative pools, fountains, water features and swimming pools for residential projects shall be limited to no more than twenty-five percent of the total developed landscape area. Turf is not permitted in new nonresidential landscape projects. These limits do not apply to recreation areas requiring large turf areas for their primary function. However, recreation areas shall be designed to limit turf in any portion of the landscaped area not essential for the operation of the recreational facility.                                                   | <a href="#">Municipal Code 16.16.070(c)(1)</a>                            | 26        |
| Roseville, CA    | Alternative Water Sources | Irrigation systems shall be designed and constructed to allow the use of recycled water where such recycled water is available or may become available in the future.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <a href="#">Municipal Code 14.18</a>                                      | 27        |
| Santa Fe, NM     | Alternative Water Sources | Alternative sources of irrigation water shall be developed, including harvested water from roof and site runoff. Gray water use is recommended where appropriate. Potable water shall be used only as a back-up or temporary irrigation water source to the greatest extent possible. The purpose of these strategies is to develop drought tolerant landscapes and to reduce the demand on the potable water system.                                                                                                                                                                                                                          | <a href="#">Land Development Code 14-8.4(E)(1)</a>                        | 28        |



## TECHNICAL MEMORANDUM

### City of Yachats Drinking Water Protection Plan Monitoring Plan

**To:** Rick McClung, City of Yachats

**From:** Renee Fowler, GSI Water Solutions, Inc.  
Suzanne de Szoeki, GSI Water Solutions, Inc.

**Attachments:** Attachment A. Stream Channel Reference Sites: An Illustrated Guide to Field Technique (U.S. Department of Agriculture, 1994)  
Attachment B. Discharge Measurements at Gaging Stations (U.S. Geological Survey, 2010)  
Attachment C. Stream Inspection Form Example  
Attachment D. Stream Visual Assessment Protocol Version 2 (U.S. Department of Agriculture, 2009)  
Attachment E. Surface Water Sampling Operation Procedure (U.S. Environmental Protection Agency, 2021)

**Date:** January 31, 2023

#### 1. Introduction

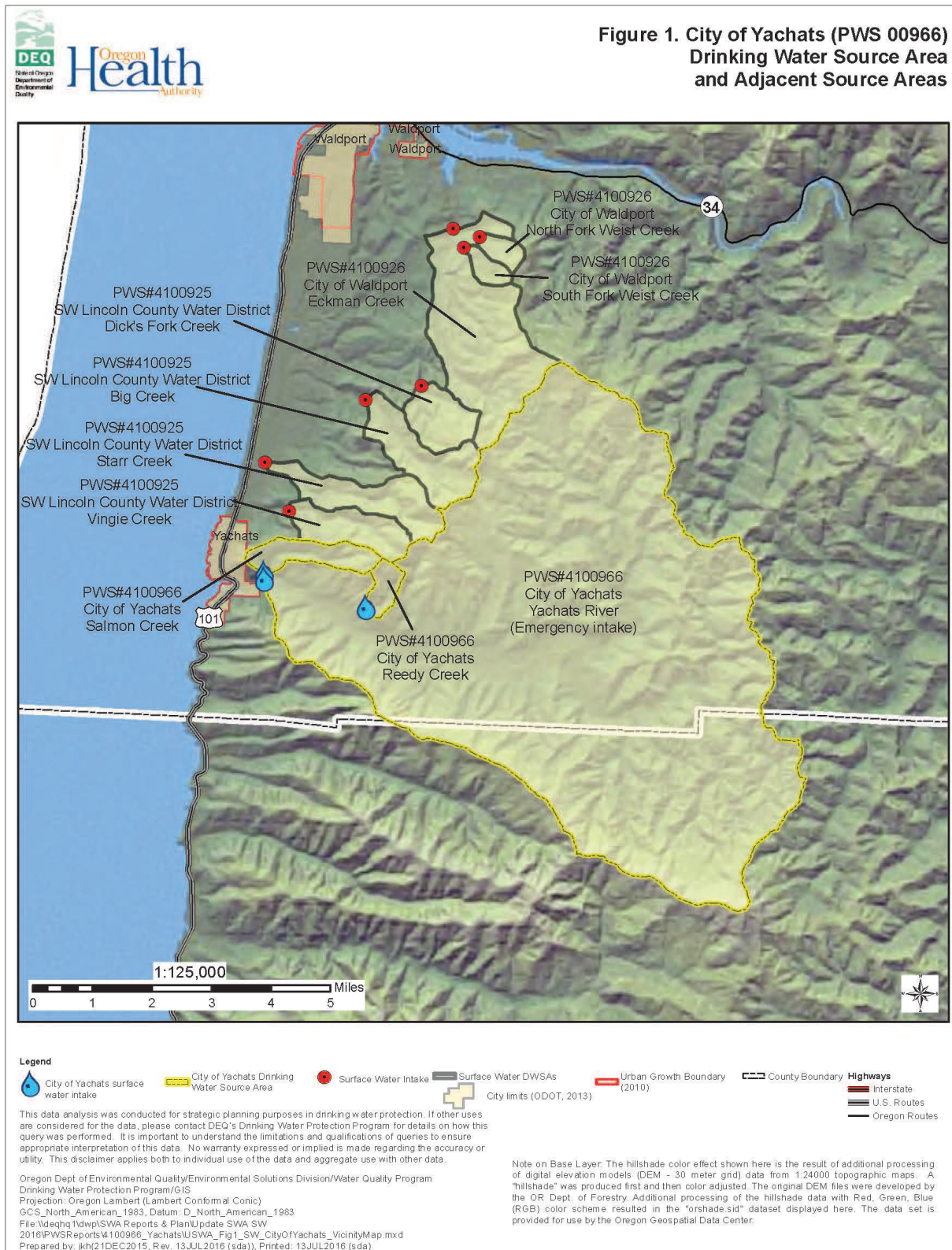
The City of Yachats (City) is the southernmost city in Lincoln County, located along Highway 101 on the scenic Oregon coast. The City's municipal water supply currently comes from two sources: Reedy Creek and Salmon Creek. The City's primary water source is Reedy Creek, a tributary of the Yachats River (Figure 1). Water from Salmon Creek, another tributary of the Yachats River, is used to supplement the supply from Reedy Creek. Protecting the watersheds of Reedy Creek and Salmon Creek is vital to preserving high water quality for the community.

In 2021, the City completed a Drinking Water Protection Plan (DWPP) that describes risks to the City's drinking water source areas, identifies strategies to address those risks, and presents an implementation plan outlining actions to implement those strategies. The DWPP's implementation plan included an action to develop a water quality monitoring plan that would enable the City to detect and address potential issues in a timely manner, specifically related to three risks to drinking water sources:

- Natural Disasters: Climate Change
- Natural Disasters: Severe Weather Events
- Forestry Management: Timber Harvest and Pesticides

The objective of this water quality monitoring plan is to help address the above risks to the City's drinking water sources by determining water quality parameters to monitor, helping identify potential monitoring locations, developing protocols and schedules for monitoring, and identifying responsible parties to conduct the monitoring.

**Figure 1. Map of Drinking Water Source Watersheds**



## 2. City of Yachats Current Water Quality Monitoring

The City's Water Treatment Plant currently monitors turbidity, pH, and temperature measurements on raw water when the Treatment Plant is actively treating water from Reedy Creek and/or Salmon Creek. However, only turbidity data is saved in the Treatment Plant's data logging system; pH and temperature data are not electronically retained. When the Treatment Plant is not treating raw water, turbidity data is not collected from either source creek (Reedy Creek and/or Salmon Creek) as no water is entering the Treatment Plant. The raw water turbidity tends to range between 0.5 Nephelometric Turbidity Units (NTU) to 80 NTU, with increases in turbidity usually correlating with heavy rains. The turbidity of treated water in the distribution system is generally 0.03 NTU.

Currently, the Treatment Plant typically treats water every other day during the winter with the aid of the City's reservoir. This schedule allows for the City to plan around short-term high-turbidity events, often associated with heavy rains.

Treated water is sampled and analyzed in accordance the City's sampling schedule with the Oregon Health Authority (OHA); the schedule is available on OHA's Drinking Water Data Online website ([yourwater.oregon.gov](http://yourwater.oregon.gov)). The objective of OHA-regulated monitoring is to ensure that the City's treated water meets or exceeds drinking water quality standards. These samples are collected by the City and transported from Newport, Oregon to Analytical Laboratory Group, Inc in Eugene, Oregon by a lab courier (available every Wednesday).

Cellular service (including data) is not available at Reedy Creek and is extremely limited at Salmon Creek and the Treatment Plant (only currently available with T-Mobile). This limitation can impact the viability of real-time monitoring at the source creeks, particularly Reedy Creek, and will influence how continuous monitoring can be implemented.

## 3. Water Quality Monitoring for Potential Risks

Maintaining high water quality is critical for municipal water supplies. The City's Treatment Plant is designed for the typically high quality raw water that is usually available in the source creeks (e.g., Reedy Creek and Salmon Creek). Monitoring the water quality of the City's source creeks for potential risks (e.g., climate change, severe weather events, and timber harvest) will help the City be more informed of stream conditions that affect the long- or short-term quality of water in Reedy Creek and Salmon Creek, and thereby, will enable the City to take more timely action to address water quality issues. This monitoring would be in addition to the City's OHA-regulated monitoring requirements, as this is associated with the water source (i.e., raw water) rather than treated drinking water.

### 3.1 Natural Disasters: Climate Change

Long-term monitoring of source water will help the City determine whether raw water quality degradation is occurring over time due to erosion, runoff, or other factors associated with climate change. Maintaining long-term records of streamflow and stream morphology will help the City identify trends that could indicate raw water quality issues that the City may want to address. The following monitoring activities are recommended for Reedy Creek and Salmon Creek.

#### 3.1.1 Continuous Water Quality Monitoring

Water quality parameters, such as temperature and turbidity, are helpful indicators to understand changes in stream morphology. For example, an increase in turbidity can indicate erosion of stream banks, urban/agricultural runoff, and various other natural and management-related causes. Similarly, the temperature of source water can be an indicator of a change in the riparian area management, such as the removal of trees (natural or anthropological) along a stretch of bank, which can lead to bank instability and

erosion issues. For this reason, both turbidity and temperature are important parameters to monitor in each source creek.

As discussed in Section 2, the City continuously monitors and electronically stores raw water turbidity levels when the Treatment Plant is treating water. If feasible, it would be beneficial to electronically store the raw water temperature measurements, too. For the purpose of this Monitoring Plan, it would be helpful to identify if the Treatment Plant is solely utilizing Reedy Creek or if Salmon Creek is supplementing Reedy Creek when storing this information for long-term record keeping.

As turbidity (and temperature) data is only collected when the Treatment Plant is actively treating water, these parameters are not measured when the Treatment Plant is not actively pulling water from the source (Reedy Creek and/or Salmon Creek). For climate change monitoring, it would be beneficial to have turbidity and temperature readings for both Reedy Creek and Salmon Creek 24 hours a day, 7 days a week. However, this maybe be challenging due to the configuration of the source water entering the Treatment Plant and the lack of cellular service, particularly at Reedy Creek. However, true continuous turbidity and temperature monitoring at both source creeks might be viable in a future capital improvement project.

### 3.1.2 Streamflow Monitoring

Long-term monitoring of streamflow in Reedy Creek and Salmon Creek is important for assessing if streamflow is decreasing over time. Additionally, it's helpful to understand how streamflow changes throughout the year for planning purposes (i.e., planning if and when to supplement Reedy Creek with Salmon Creek or confirming there is sufficient water for the City's needs). Streamflow can be measured by (1) specialized equipment to measure streamflow, (2) calculating streamflow using a weir, and (3) calculating streamflow using a staff gage and rating curve, which is discussed in more detail below.

Currently, the City measures streamflow at Reedy Creek using a flow meter at the water Treatment Plant. When streamflow at Reedy Creek is low enough that all available water is flowing into the Treatment Plant's intake, then this flow meter is sufficient to collect Reedy Creek discharge. If flow is sufficient so that water flows in Reedy Creek downstream of the Treatment Plant's intake, then an alternative method should be employed to collect streamflow measurements. One example of an alternative method is the mid-section method using a top setting wading rod with a current meter.

Salmon Creek has a V-notch weir for measuring streamflow; however, streamflow can only be measured using the weir if the City is not using Salmon Creek as a water source. As Salmon Creek is only used as a supplement when flows are low in Reedy Creek, this is likely sufficient for measuring streamflow for the purpose of long-term monitoring purposes. However, if Salmon Creek is used as a water source more in the future, it's important to collect streamflow measurements using alternative methods other than the weir. Another consideration to using the V-notch weir for streamflow measurements is that it needs to be removed during high flow events (e.g., severe weather events) to prevent damage to the weir. If the City wishes to collect streamflow measurements at Salmon Creek during high flow events or when the City is using Salmon Creek as an active water supply source, an alternative method should be employed to collect streamflow measurements. An example of an alternative method is the mid-section method using a top setting wading rod with a current meter.

This monitoring plan recommends that streamflow, or stream discharge, measurements are collected at both creeks upstream of their intakes at least six times per year for two years and four times per year thereafter for several years to create a rating curve. For Reedy Creek, collecting streamflow measurements using the mid-section method is recommended to ensure all flow is included in the measurement. The V-notch weir may be used to collect streamflow measurements at Salmon Creek when the weir is installed, but an alternative method, such as the mid-section method, is recommended during high flow events and/or when the City is using Salmon Creek as a water source (i.e., when the weir is removed).

In addition to discharge measurements, installation of a staff gage is recommended at each creek so that a correlation can be developed between (1) the discharge measurements (collected via the mid-stream method or V-notch weir) and (2) the staff gage reading. This correlation between the two data points is a rating curve, with the staff gage measurement on one axis and the discharge on the other axis. The timing of the streamflow measurements and staff gage readings should target various creek stages to enable a more robust and accurate rating curve. Once the rating curve is established, the City can estimate the creek's discharge based on the staff gage reading. It should be noted that a gage for stage height is present on Salmon Creek's weir, but it cannot be used when the weir is removed. Therefore, a staff gage would still be beneficial at Salmon Creek.

A pressure transducer installed in combination with the staff gage is recommended to provide continuous streamflow data. The pressure transducer can collect continuous measurements at the staff gage (e.g., once per hour or every 30 minutes) to track the changes in streamflow in the creeks that occur daily, seasonally, or after storm or timber harvest events. Furthermore, continuous stage data from the pressure transducer can help inform the City of potential long-term water source issues, such as increased erratic discharge events due to climate change or a prolonged and slow reduction in discharge.

Guidance documents on how to measure discharge (including V-notch weir and mid-section method with a current meter measurements) and how to install a staff gage are available in Attachments A and B.

### 3.1.3 Stream Inspections

Stream channels naturally change shape over time unless there are anthropogenic constrictions on the channel. Monitoring the morphology over time can help the City respond to these changes to minimize negative impacts to water quality. As previously discussed, changes in stream morphology includes erosion and bank stability, which can lead to high turbidity in source water and therefore decreasing water quality. One way to track stream morphology is through stream inspections on both Reedy Creek and Salmon Creek.

Ideally, stream inspections would occur quarterly to capture seasonal differences over time. This monitoring plan recommends that stream inspection locations be selected along each creek. These locations should be flagged and location coordinates collected using a global positioning system (GPS) device to enable long-term monitoring. Inspection locations are recommended along each stream upstream of the Treatment Plant intakes. One to three locations are ideal but ability to access each creek along its length will directly dictate the number and location of these stream inspection locations. Below are some considerations for stream inspection locations:

- Reedy Creek
  - Intake and Creek Description: The channel becomes braided shortly upstream of the intake. The braided section is less than a quarter mile in length before becoming a single channel again.
  - Inspection Location(s): A stream inspection location could be located almost immediately upstream of the braided channel. The area between the braided channel and over-channel vegetation (approximately 20-40 feet) could be included in the inspection location. Additional locations upstream will be more challenging as it would require clearing of vegetation covering the channel.
  - Access: The suggested inspection location can be accessed by walking up the channel, specifically the right channel (when looking downstream) during the braided section. However, this may be challenging during high flow; access should be reassessed during the spring and/or other periods of high flow. Riparian vegetation is dense and a path would need to be cleared if unable to walk up the channel.

- **Salmon Creek**
  - **Intake and Creek Description:** A small waterfall feeds into a large pool immediately upstream of the intake. Steep banks surround the pool. Immediately upstream of the waterfall, Salmon Creek consists of a series of small pools on bedrock.
  - **Inspection Location(s):** A stream inspection location could be amidst the series of pools, where there is a break in pools. Gravel deposition is occurring in this cross-section. Just downstream of the gravel deposition is an area of bank erosion that could be monitored. Therefore, including both of these areas, spanning approximately 20 feet, in the inspection location is recommended. Additional locations upstream will be more challenging as it requires clearing of vegetation covering the channel.
  - **Access:** Current access is bushwacking up a steep bank alongside the pool to access the creek upstream of the waterfall. This access is likely unsafe in inclement weather and creating a path for field personnel is recommended. Additionally, the bedrock makes for a slippery walking surface so field staff should be cautious.

When performing the Reedy Creek and Salmon Creek inspections, the following information is recommended to be documented at each stream inspection location using a field form, such as the example form provided in Attachment C:

- Channel conditions, include cross section description, general flow description, scouring, deposition, bank condition, streambed material, bankfull, wetted width, maximum depth, and average depth.
- Riparian conditions, including upper and mid canopy descriptions, ground cover description, and canopy cover over the channel.
  - Alternative to an estimated percentage of canopy cover as outlined in Attachment B, a Solar Pathfinder could be used for more accurate data.
  - A Streamside Vegetation Assessment (an Oregon Department of Agricultural concept) every 5 or 10 years would be beneficial, too.
- Water conditions, including appearance, and field turbidity and temperature measurements.
- Photographs of channel and riparian conditions should be taken and descriptions recorded on the stream inspection form. Photo monitoring site locations should also be recorded through descriptions and photograph. In addition, markers could be placed at photo monitoring sites.

Prior to field staff performing the stream inspection, staff should review and understand guidance documents related to stream assessments, such as the one provided in Attachment D. When applicable, water quality meters should be calibrated prior to using.

## **3.2 Natural Disasters: Severe Weather Events**

Severe weather can lead to high flow events (associated with heavy precipitation) and erosion, which can lead to increased turbidity and nutrient overload in the creek.

### **3.2.1 Streamflow Surges**

High precipitation during a severe weather event can lead to flashy high flow events in Reedy Creek and/or Salmon Creek, which can result in soil erosion and bank instability that contributes to sedimentation and turbidity in the stream. Much of this information will be qualitatively collected during the quarterly stream inspections related to climate change monitoring (Section 2.1.2). Long-term monitoring of the peak creek stage during these severe weather events would also be helpful to understand if storm surges are increasing in intensity over time. A crest gage could be installed on the staff gage (suggested in Section 3.1.2) to capture the peak creek stage. A traditional crest gage consists of a metal pipe with a wood pole and crushed cork inside; the cork will rise within the pipe as the stage increases and adhere to the wooden pole. This

device is accurate at measuring the peak stage but needs to be reset after each storm. Alternatively, a pressure transducer (also suggested in Section 3.1.2) could gather this information. Although the ultimate peak stage could be missed depending on the duration of the stage and frequency of the pressure transducer readings, a pressure transducer is advantageous as it does not need to be reset after each storm, provides pre- and post-storm readings, and roughly records the storm's duration.

### 3.2.2 Analytical Water Quality Samples

Severe weather events can temporarily impact the quality of the City's source water, with elevated turbidity as the main concern. Additionally, there is a potential for nutrient overload in combination with high turbidity, which can lead to an algae event. Water quality monitoring is recommended prior to each storm season, which roughly begins in November, and after extreme storms in areas prone to excessive erosion and sedimentation. Collecting two grab samples per creek each storm season, in addition to a baseline sample, is recommended.

Water quality samples for laboratory analysis should be collected at Reedy Creek and Salmon Creek. The Reedy Creek sample could be a grab sample from the Treatment Plant sample port if Reedy Creek was the only source for the Treatment Plant or from the creek near the intake. The Salmon Creek sample would be collected as a grab sample from the creek near the intake. Grab samples from the creeks should be collected within 24 to 48 hours after the storm, but only as access and safety allow.

Each sampling event would include the following analyses at each creek:

- Field turbidity, temperature, and pH using a water quality meter
- Total suspended solids by Standard Method (SM) 2540 D
- Total organic carbon by SM 5310B
- Nutrients and inorganic compounds
  - Nitrate and nitrite by U.S. Environmental Protection Agency (EPA) Method 300.0<sup>1</sup>
  - Total Kjeldahl nitrogen by SM 4500-N(org) C
  - Phosphorous by EPA Method 365.3
  - Orthophosphate phosphorus by EPA Method 300.0<sup>1</sup>
  - Potassium by SM 3111 B
  - Sulfate by EPA Method 300.0

Grab water quality samples collected from the Treatment Plant should follow City sampling protocols using laboratory supplied bottles. Field personnel should become familiar with how to collect a grab sample from the creek, potentially using the dip method or swing arm/scoop method described in the guidance document provided in Attachment E.

## 3.3 Forestry Management

The forested watersheds comprising Yachats' current drinking water source areas are predominantly owned by the United States Forestry Service and are part of the Siuslaw National Forest. However, a significant portion of the Salmon Creek watershed, directly upstream from the drinking water intake, is private industrial timberland. Oregon's Forest Practices Act sets standards for forestry operations, access roads, reforestation, and water protection, among other issues. Nonetheless, forestry practices may still have the potential for drinking water quality impacts due to lack of compliance or gaps in regulations.

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<sup>1</sup> Sample will need to be received at an analytical laboratory, such as Analytical Laboratory Group, Inc. in Eugene, Oregon, within 24 hours of collection.

### 3.3.1 Timber Harvest

As needed, monitoring downstream of identified problem areas after timber harvest is recommended to assess whether water quality degradation is occurring by erosion, runoff, or other factors.

Performing stream inspections (outlined in Section 3.1.3) will provide a baseline for each creek that can be referenced for comparison of stream conditions following a timber harvest. If additional inspection locations downstream of timber harvest areas could potentially yield helpful water quality data, then additional inspection locations should be added if possible. Stream inspections should increase in frequency from the baseline frequency to monthly shortly following a timber harvest if impacting water quality. Stream inspection frequency can decrease as the stream reestablishes its equilibrium. The key elements in the stream inspection outlined in Section 3.1.3 and Attachment B to monitor after timber harvest include:

- Field turbidity and temperature measurements using water quality meters.
- Documentation and pictures of scouring, deposition, bank stability, and riparian vegetation. Pictures of the creek reestablishing itself are critical.

### 3.3.2 Forestry Pesticides

Over-application or improper handling of pesticides (i.e., insecticides, fungicides, and herbicides) used in forestry management, or aerial spraying, could contaminate drinking water sources. Timing of applications can potentially contribute to water quality impacts, such as applying pesticides before precipitation events or during periods during the year when breakdown by soil microorganisms is slower, by increasing the likelihood of the pesticides making it into drinking water sources.

The City can track if a pesticide permit has been pulled for application in either Reedy Creek or Salmon Creek watersheds. If pesticides have been applied to either watershed, the City should collect a water quality sample from the applicable creek and have it analyzed for pesticides.

## 4. Implementation

Implementation activities involved in monitoring the risks associated with climate change, severe weather events, and timber harvest events include: (1) streamflow monitoring, (2) stream inspections, and (3) water quality samples. Table 1 outlines when each of these monitoring activities should occur throughout the year, what parameters are involved, and how the information is collected.

**Table 1. Climate Change and Severe Weather Event Monitoring Implementation**

| Monitoring Activities                                                   | Schedule |          |    |          | Parameters                                                                   | Approach                                                                                                             |
|-------------------------------------------------------------------------|----------|----------|----|----------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|                                                                         | Q1       | Q2       | Q3 | Q4       |                                                                              |                                                                                                                      |
| Streamflow Monitoring <sup>1</sup>                                      | X        | X        | X  | X        | Stream discharge                                                             | Reedy Creek: mid-section method<br>Salmon Creek: weir or mid-section method                                          |
|                                                                         |          |          |    |          | Stream stage                                                                 | Staff Gage: manual recording<br>Pressure transducer: continuous recording, download quarterly                        |
| Add-On Streamflow Monitoring <sup>1,2</sup><br>(Year 1 and Year 2 only) | -        | Jun      | X  | -        | Stream discharge                                                             | Reedy Creek: mid-section method<br>Salmon Creek: weir or mid-section method                                          |
|                                                                         |          |          |    |          | Stream stage                                                                 | Staff Gage: manual recording<br>Pressure transducer: continuous recording, download quarterly                        |
| Stream Inspections <sup>1</sup>                                         | X        | X        | X  | X        | Observations: scouring, deposition, bank stability, riparian vegetation      | <ul style="list-style-type: none"> <li>Record observations on Stream Inspection Form</li> <li>Photographs</li> </ul> |
|                                                                         |          |          |    |          | Stream field parameters: turbidity, temperature, and conductivity (optional) | Water quality meters                                                                                                 |
| Baseline Water Quality Samples <sup>1,3</sup>                           | -        | -        | -  | Oct      | Stream field parameters: turbidity, temperature, and pH                      | Water quality meters                                                                                                 |
|                                                                         |          |          |    |          | Analytical samples: TSS, TOC, nutrients and inorganic compounds              | Reedy Creek: grab near intake or treatment plant sample port<br>Salmon Creek: grab near intake                       |
| Post-storm Water Quality Samples <sup>1,3,4,5</sup>                     | X        | Apr, May | -  | Nov, Dec | Stream field parameters: turbidity, temperature, and pH                      | Water quality meters                                                                                                 |
|                                                                         |          |          |    |          | Analytical samples: TSS, TOC, nutrients and inorganic compounds              | Reedy Creek: grab near intake or treatment plant sample port<br>Salmon Creek: grab near intake                       |
| Pesticide Water Quality Sample                                          | -        | -        | -  | -        | Analytical samples: pesticides                                               | Collect grab sample as needed if pesticides applied within Reedy Creek or Salmon Creek watershed.                    |

**Notes**

<sup>1</sup> Activity should occur at both Reedy Creek and Salmon Creek.

<sup>2</sup> In Year 1 and Year 2 of streamflow monitoring, two (2) additional streamflow measurements should occur at Reedy Creek and Salmon Creek in addition to the quarterly streamflow monitoring. These two additional measurements should occur between June 1 and September 30.

<sup>3</sup> Samples will need to be received at an analytical laboratory, such as Analytical Laboratory Group, Inc. in Eugene, Oregon, within 24 hours of collection.

<sup>4</sup> Collect two (2) samples per storm season.

<sup>5</sup> Sample needs to be collected 24 to 48 hours after the severe weather event, as safety allows.

Nutrients and inorganic compounds = nitrate, nitrite, total Kjeldahl nitrogen, phosphorous, orthophosphate, potassium, and sulfate.

Q1, Q2, Q3, and Q4 = first quarter (January-March), second quarter (April-June), third quarter (July-September), and fourth quarter (October-December)

TOC = total organic carbon

TSS = total suspended solids

X = activity should occur anytime within the quarter; month(s) are indicated as needed

## 4.1 Next Steps

This Monitoring Plan is a framework of possible monitoring activities that the City can implement in support of their DWPP. The City should consider the following prior to implementing these monitoring activities:

- Identify which monitoring activities the City would like to implement. This includes reviewing the recommendations in this Monitoring Plan and exploring costs and logistics associated with the recommendations.
- Identify who will perform the monitoring activities. This could include City staff, consultants, and/or non-profits.
- Develop specific and detailed protocols for monitoring activities that were selected.

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| Activity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Category  | Priority | Cost   | Benefit     | Responsible Party | Timeline for Completion     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|--------|-------------|-------------------|-----------------------------|
| <ul style="list-style-type: none"> <li>Hwy 101 sign for north and south-bound traffic calling out public parking, and EV charging station, at City Hall and the Commons, and RV parking on 4<sup>th</sup> Street;</li> <li>Ocean View Drive signs for south-bound traffic calling out public parking, including RV parking, on 4<sup>th</sup> Street, at rear of Commons, and 2nd Street;</li> <li>RV parking (parallel or curbside) sign along 4<sup>th</sup> Street;</li> <li>RV parking sign at La De Da Lane subject to 6th Street parking feasibility</li> <li>“No parking” sign and pavement markings on east side of Beach Street, just north of Ocean View Drive intersection.</li> </ul> | Signage   | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Signage   | Medium   | Low    | Medium      | PW&S              | When City obtains ownership |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Signage   | Medium   | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Signage   | Low      | Medium | Medium      | PW&S              | < 6 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Signage   | High     | Low    | High        | PW&S              | < 3 months                  |
| <ul style="list-style-type: none"> <li>East side of Hwy 101 between Yachats River Road and Prospect;</li> <li>East side of Hwy 101 between Prospect and 2nd Street;</li> <li>Unstriped portion of City Hall, particularly ramp exiting drive thru area;</li> <li>North and south sides of 4th Street;</li> <li>East and west sides of Pontiac Street between 3rd and 4th Streets;</li> <li>West side of Beach Street from intersection with 1<sup>st</sup> Street to PO driveways.</li> <li>East side of Beach Street from “no parking area” to 2nd Street.</li> </ul>                                                                                                                            | Striping  | High     | Low    | Medium-High | PW&S<br>ODOT      | < 12 months                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping  | High     | Low    | Medium-High | PW&S<br>ODOT      | < 12 months                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping  | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping* | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping* | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping  | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping  | High     | Low    | High        | PW&S              | < 3 months                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Striping  | High     | Low    | High        | PW&S              | < 3 months                  |

| Activity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Category              | Priority | Cost   | Benefit     | Responsible Party | Timeline for Completion |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------|--------|-------------|-------------------|-------------------------|
| <ul style="list-style-type: none"> <li>Upon City acquisition of Ocean View Drive, eliminate 5 perpendicular (head-in) spaces at intersection of Ocean View Drive and Highway 101; consider replacing vehicle parking spaces with bicycle parking area/facilities;</li> <li>Upon City acquisition of Ocean View Drive, west side of Drive at State Park.</li> <li>Implement pilot on-street parking striping during summer peak on east 1st, 2nd, or 3rd Streets to determine benefits and impacts.</li> </ul>                                                                                      | Striping              | High     | Low    | High        | PW&S              | Upon City acquisition   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Striping              | Medium   | Low    | High        | PW&S              | Upon City acquisition   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Striping              | Medium   | Low    | Medium-High | PW&S              | < 12 months             |
| <ul style="list-style-type: none"> <li>Add City public parking lots and EV charging station to Google Maps;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Public Information    | High     | Low    | Medium-High | City Planner      | < 3 months              |
| <ul style="list-style-type: none"> <li>Research and acquire state or federal grants to solicit bids from consultants to prepare Yachats Wayfinding and Branding Plan, and City-wide traffic circulation plan; implement plan recommendations;</li> </ul>                                                                                                                                                                                                                                                                                                                                           | Planning              | Medium   | Medium | High        | PC and PW&S       | < 3 years               |
| <ul style="list-style-type: none"> <li>Temporary traffic-calming measures for 4th Street;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Street** Improvements | Low      | Low    | High        | PC and PW&S       | 6-12 months             |
| <ul style="list-style-type: none"> <li>Decide between three available options for expiring Covid off-street parking waiver:               <ol style="list-style-type: none"> <li>1) Require business to meet existing off-street parking requirements;</li> <li>2) Amend off-street parking minimums so all Yachats businesses utilizing Covid waivers are in compliance; or</li> <li>3) Develop off-street parking credit program to allow businesses to attain compliance without impacting services and financially supporting future city parking initiatives/programs.</li> </ol> </li> </ul> | Planning              | High     | Low    | High        | PC and Council    | < 3 months              |

| Activity                                                                                                                                                                                                                                                                                           | Category | Priority | Cost       | Benefit | Responsible Party | Timeline for Completion |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------|---------|-------------------|-------------------------|
| <ul style="list-style-type: none"> <li>Time-limiting (ex., 2-hour) parking signs in strategic locations (i.e., east 2<sup>nd</sup> Street, Beach Street, Prospect, etc.);</li> <li>No overnight parking signs at strategic locations (4<sup>th</sup> Street, Commons, City Hall, etc.);</li> </ul> | Signage  | High     | Medium-Low | High    | PW&S              | < 6 months              |
|                                                                                                                                                                                                                                                                                                    | Signage  | High     | Low        | High    | PW&S              | < 6 months              |
| <ul style="list-style-type: none"> <li>Consider community parking requirements and incorporate striped parking in La De Da Lane improvement and Park Master Plan design;</li> </ul>                                                                                                                | Planning | High     | Medium     | Medium  | City              | 12-18 months            |

- “\*” Single asterisk means use of non-permanent pavement markings, such as yellow fire hoses or painted markers fixed to ground, to delineate full perpendicular (head-in) or diagonal parking space dimensions. Objective is to avoid extending pavement by striping non-paved gravel or grassed surfaces.
- “\*\*” Double asterisk means use of non-intrusive traffic calming devices, such as movable planters, temporary pavement striping, etc., to visually narrow a public street in a way that discourages speeding by thru-traffic.