



City of Brownsville

Total Maximum Daily Load Plan

(TMDL)

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1. Introduction

1.1. Purpose and Scope

This TMDL Implementation Plan has been prepared in accordance with the Oregon Department of Environmental Quality (ODEQ) and the Oregon Administrative Rule (OAR) 340-042-0080(3).

The purpose of the plan is to minimize the discharge of pollutants to streams and waterways through existing treatment strategies, potential proposed methods for monitoring, education, and other implementation activities. The plan focuses on the minimization, or when possible the elimination of, heat, bacteria, and mercury contributions to surface waters influenced by the City of Brownsville.

2. Responsibilities

2.1. Mayor and City Council

The City Council shall ensure assignment of responsibility for implementing the contents of this TMDL Plan, its review, and any pertinent changes are made as required. Council shall receive an update from staff twice a year in May & November. Council shall review and approve any changes to this plan. Upon assignment, the assignee shall compile required evaluations and submit a summary as required to the Oregon Department of Environmental Quality (DEQ).

2.1.1. Funding

It is the responsibility of the Mayor and City Council to determine funding sources for this plan as funds are available within the general budget of the City of Brownsville. It is anticipated that any funding required will be taken out of associated areas of responsibility (e.g. parks, sewer, drainage, etc.), but will primarily come from the General Fund. The City of Brownsville has many funding priorities ahead of TMDL. Other federally mandated requirements for wastewater and water have led to \$8M in bonded debt on a very limited customer base. The bonded debt is in effect until 2038. The City is also looking at a major Water Treatment Plant renovation in 2024 which will require additional bonding. The City is responsible for over \$42M in assets with nearly 40% of the facilities & systems in poor or critical condition.

The City has many amenities supported by the General Fund including an extensive park system with many capital assets at the end of their useful life, a City Hall that was originally a church circa 1860's, a City Shop building circa 1950's, a Library circa 1970's and several other aged facilities. Budgetary carve outs for unfunded mandates such as TMDL are not a budgetary priority for the City of Brownsville.

2.2. City Administrator

The City Administrator is responsible for ensuring the Mayor and City Council are made aware of the assignment responsibilities, its requirements, and that review and reporting of this Plan is completed as required. The TMDL is reviewed in May & November of each calendar by City Staff and the Council.

2.3. Brownsville Residents

Brownsville residents are responsible for complying with any City ordinances put in place to meet TMDL requirements. In addition, residents are expected to comply with all state and federal regulations governing erosion and sediment control, pet and animal waste disposal control, and all other pertinent government ordinances and regulations. The Brownsville City Council requests on the behalf of residents that the State of Oregon require other major contributors that degrade the Calapooia River's water quality to the same standards as stated for Brownsville residents.

3. Plan Overview

3.1. City of Brownsville General Description

The City of Brownsville, Oregon is a small rural community located in the southern Mid-Willamette Valley. Brownsville was originally settled in the mid 1840's. The City was an important industrial center in the 19th Century after the development of the Brownsville Millrace which provided power to several local industries. Brownsville is located five miles east of Interstate 5 on State Highway 228 at the edge of the Cascades foothills.

A relatively small community (current population approximately 1700) it is located amongst the agricultural areas of the southern Willamette Valley, but few of the residents are directly involved in the agricultural industry. Due to its isolation from centers of employment most residents either commute to jobs in Eugene, Albany, Corvallis or Salem or are retired or self-employed.

Climate is typical of that of the southern Willamette Valley. The soils are usually moist and are saturated with water during the winter and spring. The mean annual soil temperature is 52 to 55 degrees F.

Approximately seventy-five percent (75%) of the City's area is essentially flat with slopes of less than 0.5 percent and are located at the eastern edge of the Willamette Valley. Approximately forty percent (40%) of the City's area lies within the 100-year floodplain of the Calapooia river, which runs through the middle of town. Approximately twenty-five percent (25%) of the City is on the Cascades foothill, ranging in slope up to thirty percent (30%). Existing Land Use is described in the City's Comprehensive Plan and includes residential, commercial, industrial and public lands.

3.2. Water Sources

3.2.1. Ground Water

The City of Brownsville operates a municipal drinking water system. The water source is described as groundwater under the influence of surface water. There are two sources of water, a series of four wells and an infiltration galley, both of which are located close to the Calapooia River and receive water from the Calapooia after it travels through the gravel layers under and adjacent to the river. These areas are both located in Pioneer Park on public property. The City protects these areas by carefully limiting or avoiding the use of any fertilizers / herbicides / pesticides in Pioneer Park, as well as by providing a network of pet waste collection stations throughout the park. Pioneer Park has a significant tree canopy as well and natural vegetation along the full run of the riparian area of the Calapooia River.

3.2.2. Ground Water Protection

The City has been flexible and progressive in dealing with proposed improvements both residential and commercial projects. The City requires the use of bio-swales and settling

ponds where possible to limit the impacts of storm runoff in Brownsville and intends to continue this practice.

3.2.3. Stormwater Conveyances

Stormwater conveyance through the City is achieved through a series of ditches with very little underground piping systems. [Eighty percent (80%) of the City's 'system' consists of open ditches.] The Brownsville Mill Race forms an important part of the City's stormwater system in the middle of the City. Stormwater drains to three general places out of the City of Brownsville. The drainage on the south end of Brownsville flow to Lake Creek, on the north end to Cochran Creek and all ultimately feed back into the Calapooia River. The City completed a Drainage Master Plan in 1997 as prepared by Lee Engineering, Inc. Consulting Engineering of Oregon City, Oregon. The Plan concludes by stating, "...most of the City of Brownsville's current storm system... (are) inadequate and do not exist."

For new developments, design standards are in place to ensure adequate stormwater detention and conveyance through piping, swales, and other detention systems. Strict adherence to the City's Public Works Standards is a requirement of all applicants. The Public Works Superintendent, City Administrator, Administrative Assistant in charge of Planning, the Planning Consultant and the City Engineer work in coordination to ensure regulations and requirements are met.

The major problem for Brownsville stormwater drainage is the State has no way of requiring farmland to maintain drainage ways. Due to the influence and power of the Agriculture Industry, this basically short-circuits an adequate drainage shed for Brownsville. All potential areas for stormwater to flow end in agricultural lands.

3.3. Description of City of Brownsville Sewage Treatment Permit and Facility

3.3.1. Permit Description

The City of Brownsville operates two separate wastewater treatment systems, one located north of town on Seven Mile Lane and the other located off Hwy. 228 at the western City Limits. This is due to a ridge which runs through the middle of the downtown area and splits the town into two drainages. The City holds a National Pollutant Discharge Elimination System (NPDES) Permit from the ODEQ pursuant to ORS 468B.050 and subsequently The Federal Clean Water Act. The permit covers the cities STEP Stabilization Lagoon for treated wastewater, and for potential reclaimed water reuse, or irrigation. The receiving stream is the Calapooia River in the Upper Willamette River sub-basin located in Linn County. Discharge only occurs during the winter months during periods of high flow.

Treated effluent parameters include BOD, TSS, E. coli Bacteria, pH, and Total Chlorine. Other details and specifications for this system are on file within the City office, the DEQ, and as required within NPDES permit applications.

3.3.2. Sewage Treatment Plant

Brownsville Municipal Code 13.05.150 requires all buildings located within two hundred (200) feet of a street which has or could have a municipal wastewater main to connect to the City sewer system. This requirement has been in place since 1964 and currently all residences within the City are connected to City sewer except for two homes located in a remote location at the northeast part of town where sewer service is not available now. The City has historically not had a cross connection problem due to the installation of the original wastewater system and policies in 1964.

The City sanitary sewage treatment plants are described as follows. As previously noted, there are two separate systems which have recently been interconnected. The original major sewer construction took place in 1964, with major additions being completed in 1978. The City completed an \$8.5 million upgrade to the sewer system which began in 2007. The North system consists of two lagoons, a primary and a secondary. The treated output of the secondary lagoon can be used to spray irrigate a hay field in the summer when there is agricultural demand. In the winter, the discharge is chlorinated and then pumped through a force main almost a mile south to the South Lagoons where it is combined with the output of that system and discharged in to the Calapooia River through a multi-port diffuser system.

The South Lagoon system consists of a three-cell lagoon system with a total of approximately thirty (30) acres. Effluent is chlorinated, then de-chlorinated and discharged to the Calapooia River per a hydrologic discharge schedule developed in accordance with DEQ. Discharge occurs only during the winter months when flows are high and temperatures low. The lagoons are shallow and maintain a temperature close to that of the Calapooia River. Effluent flows are low compared to the flows of the river at the time of discharge as required by the NPDES permit; the permit was updated in 2017.

The City completed an \$8.5 million project to upgrade both the lagoon treatment systems and the collection system. Collection system improvements are designed to reduce the amount of inflow and infiltration and improve system capacity to prevent accidental system surcharges which have occurred in the past during high flow conditions before 2008. Lagoon system improvements have enhanced the quality of the effluent and to add a de-chlorination phase to the project in addition to providing a winter discharge point for the North Lagoon system. The new facilities have been on-line since late February, 2008. The wastewater collection lines were completed July 2008. During construction, the City found only four illegal cross-connections which were taken care of during the construction phase.

The City completed a major repair to the Millhouse Sanitary Sewer collection line in 2014 which made significant improvements near the Mill Race. The City still has forty-five (45%) of the sanitary sewer lines that are at or beyond their useful life.

3.4. Potential Sources of Contaminants to Soil & Waters

Contaminants can enter the soils, storm water, and sanitary sewer system from the following potential and/or identified sources:

- Improperly applied pesticides, herbicides and fertilizers from both homeowners and agricultural applications.
- Leaking above and underground storage tanks.
- Chemical spills on highways, railways, and from business activity.
- Improperly installed or old domestic wells.
- Poorly maintained septic systems.
- Unpermitted or unauthorized waste disposal sites or dumping.

Entry from improperly installed or domestic wells can occur because of a couple of factors. Nitrates tend to stay on top of the aquifer. When a well begins pumping at a fast rate, it pulls down the top waters (containing nitrates) and pumps them for use. If the well is pumped at a slower rate, it will draw the waters from the lower portion of the well. Also, State requirements for well casing are to install to 18 feet, with an additional foot above the surface. Another method of entry is at the well top. If the well is not packed or backfilled correctly with concrete and/or the appropriate materials; contaminants can enter from the surface in and around the top of the casing.

The Calapooia River valley is home to both significant livestock populations and rural residential development along the river, both of which contribute coliform bacteria to the river. The headwaters of the Calapooia River begin forty-four (44) miles from Brownsville in the Tidbit Mountains of the Cascade Range. The BLM and agriculture lead to most of the ‘contamination’ of the Calapooia River.

3.5. TMDL Requirements

3.5.1. Performance Monitoring

Performance monitoring shall be tracked utilizing the TMDL Implementation Tracking Matrix included in this Plan. This matrix will be used to track the effectiveness of the City’s efforts in reducing pollutant loads.

3.5.2. Review and Evaluation

A review of the TMDL Plan will be conducted as required under OAR 340-042-0080(3) (a) (C) and Water Quality Management Plan (WQMP) once every five years. Results of that review will be submitted to the DEQ. Modifications will be made in accordance with state requirements. The City Staff and Council review the plan as part of two (2) regular Council sessions in May and November of each year.

3.5.3. Reporting

As required, an annual report will be submitted to the DEQ describing the progress of the City's TMDL management strategies.

3.5.4. TMDL Pollutants and Potential Sources of Pollutants

The following pollutants will be addressed in the TMDL. They are temperature, bacterial, and mercury. Suspected sources of the pollutants are:

- **Warmer In-stream Temperatures:** Caused by historic removal of shade-producing vegetation along streams. Decreased summer flows are also most likely a result of logging activities throughout the upper watershed as well as long-term climatic changes. Channelization of the river and an increased gravel load have resulted in large areas of shallow riffles and a decrease in the number of deep holes, also contributing to higher summer temperatures.
- **Fecal Coliform:** Likely sources include domestic animal waste carried in stormwater runoff and resulting from livestock being allowed direct access to the river. In addition, septic systems, if leaking, are a source of contamination. The City does not allow septic systems inside the City limits.
- **Mercury:** Found in sediments; likely source is erosion from construction sites not covered by DEQ permit (i.e., sites with disturbed ground surface area of less than 1 acre) as well as seasonal erosion and slides from adjoining soil banks during periods of high flow. Agricultural activities can also contribute sediments and most land around and through Brownsville is used for agricultural purposes. The Calapooia River is not listed as water quality limited regarding mercury.

4. Other

Brownsville City Council understands the programmatic efforts being imposed by the Environmental Protection Agency (EPA) through the DEQ under the Clean Water Act. Council is interested in promoting these programmatic efforts as local funding allows, at the sole discretion of Council. Public education is a major component of the City's TMDL Plan. The other major component of the plan is to ensure that new developments and re-developments implement stormwater best management practices to minimize the overall effect to the City's stormwater management concerns.

Council will not create a stormwater utility due to the major needs the City has for the existing water and sanitary systems. Council completed a Drainage Master Plan in 1997 in response to the flood of 1996. The outcome of the report was that the City did not have an adequate drainage system. The cost to implement a skeletal stormwater system was \$3 million plus. The system was design using the Rational Model and a 5-year storm event. Council has chosen to not fund storm water drainage due to the overall ineffectiveness of such a system. Council is aware of the huge financial burden it would place on citizens.

Council also has significant responsibilities to continue to provide for public safety including a municipal court, a full-service library, a road system, Public Works fleet management, an extensive park system including a recreation center, a cemetery, City Hall, the City Public Works Shop among other assets. Council must also have a qualified, competent Staff to carry out the responsibilities of the Brownsville Municipal Code and other programmatic efforts of other governments. The City has a significant investment in employees training, salary and benefits. Cities, especially small ones, are facing serious financial implications due to State laws that effect how cities in profound ways. The State of Oregon's tax structure permanently limits the amount of taxes cities can receive and limits the annual increase allotted to cities.

The Federal government, nor the State of Oregon have provided meaningful funding for stormwater capital infrastructure. Furthermore, in many cases, stormwater infrastructure is relatively limited in preventing major flooding problems for residents when major flooding events occur. Flooding events in Brownsville would not be significantly improved by installing stormwater infrastructure given the topography of the City and the dynamics of the Calapooia River. The benefit does not outweigh the financial burden.

Brownsville City Council has been extremely active attempting to keep up with vital capital infrastructure projects without going to the voters for additional bond debt. The City has completed nearly \$4 million of capital improvements since 2007; this demonstrates Council's attentiveness to the needs of the capital infrastructure, but clearly demonstrates a rational approach to financial burden of the citizens. Below is a list of some of the general improvements that have been made:

Projects Since 2007

Project Description		Total
WWTP (N & S)	\$	8,500,000
Stanard Culvert & Water Line	\$	380,000
WTP Filters	\$	180,000
WTP Computers/Telemetry	\$	30,000
Robe Street Water Line	\$	185,000
Calapooia River Crossing	\$	50,000
S. Oak Street Water Line	\$	190,000
Averill/GR 12 Water Line	\$	320,000
Washburn Water Line	\$	168,000
School Hill, Various	\$	65,000
Millhouse SS	\$	285,000
Pump Station	\$	42,000
Paving (Various Locations)	\$	360,000
Pioneer Park Restroom	\$	96,000
Backhoe	\$	93,000
Vehicles	\$	95,000
City Hall	\$	130,000
Rec Center	\$	150,000
Pioneer Park Various		
Improvements	\$	58,400
Signage (Various Locations)	\$	11,000
Library Various Improvements	\$	107,500
Sidewalks (Various Locations)	\$	32,000
Inspections	\$	16,800
Public Works Standards	\$	3,800
Red Barn	\$	6,200
Bishop Way Water Line	\$	312,000
TOTAL	\$	3,366,700

Local Funding Implications

The City receives just over \$600,000 in General Fund money annually. The City spends between \$1,750,000 to \$2,300,000 annually depending on what major capital improvement or pressing need Council must address. The City simply does not have adequate funding to keep pace with current infrastructure needs. The State of Oregon continue to pre-empt local control, pass new laws that are one-size-fits all, and continually change requirements through their myriad of agencies. Loan programs come with strings that make the actual implementation of State and Federal policies entirely too burdensome on the local taxpayer. Meanwhile, cities are treated poorly by State agency representatives

who continue to demand and promulgate their authority without understanding the priorities of the local government.

How does the Federal and State governments expect cities to keep pace with additional requirements? Unfunded mandates such as these have led to major concerns for cities across the United States. The City's current debt load could potentially have dire implications when the City prepares for the construction of a new water treatment plant and water distribution improvements in 2025. The City is also facing major capital improvement needs in other general areas as mentioned throughout this report. The government bends to special interests and takes advantage of the taxpayers through this kind of policy enforcement and implementation strategy.

5. Conclusion

The City of Brownsville, Oregon has chosen a variety of strategies we believe critical to the success of our TMDL Plan. Because of financial limitations, the City has chosen those strategies it believes can be easily integrated into design and development code within our existing processes and protocols for development. Many of our strategies focus around education and can be accomplished with assistance from agencies like the Department of Environmental Quality, Watershed Councils and resources such as Oregon State University. There are some strategies, however, that may require additional funding from outside sources (e.g. grants) due to the limited financial resources of the City. The Calapooia Watershed Council does a tremendous job in Brownsville with public education and plantings throughout the riparian areas of the Calapooia River.

The following TMDL Implementation Tracking Matrix will serve as the City’s tracking tool, but is not limited to this matrix.

Implementation Tracking Matrix

POLLUTANT	SOURCE	STRATEGY (What we are doing and will do to reduce pollution from this source)	ACTIONS (Specific ways to implement strategies)	MEASURE (How we will track successful implementation or completion)	TIMELINE	STATUS	UPDATE
Bacteria	1. Pet & animal waste	Inform residents about potential bacterial water contamination animal waste.	Short term: Provide information in City Newsletter and provide dog waste bags in City parks.	Newsletter distributed. Resident feedback.	Completed	Short term: Heightened public awareness related to these issues	Annually: Waste bags ordered and stocked as needed; installed an additional site downtown.
		Install pet waste signs in public areas	Long term: Ongoing education to reinforce message.		Ongoing	Long term: Public awareness into the future.	See Above
	2. Stormwater BMP's	Continue to evaluate, design, and adopt stormwater best management practices for water quality when necessary for new development and re-development. Require extensive review by City Staff including the City Engineer, Planning and Public Works.	Continue existing practices and protocols. Keep Public Works Standards and necessary Municipal Code requirements in place.	Continue to utilize best management practices when developments occur.	Ongoing	2015: Completed the adoption of Public Works Standards.	Ongoing.
	3. Inflow & Infiltration	Keep infiltration and inflow of the City's sewer system to a minimum. <i>(This issue is related to mainly stormwater.)</i> Perform ditch maintenance as needed.	2007 WWTP Improvements significantly reduced infiltration problems. Public Works performs annual ditch maintenance.	Public Works Superintendent will track maintenance efforts.	Ongoing	Ongoing	Annually: Update maintenance inventory list.
	4. Erosion & Sedimentation	Current development code requires developers to adhere to ODEQ NPDES Permit requirements for erosion control for areas >1 acre.	Continue current practice of reviewing residential and commercial projects to ensure compliance.	Verification of 1200C compliance as needed.	Ongoing	Ensure Erosion Control requirements for developments.	Ongoing.
		Encourage smaller parcels to follow 1200C plan for project.	Revise building permit review process to include providing builder with a copy of the 1200C plan.	Staff reports plans have been included for builders.	Include on all individual lots.	Receive 1200-C plans from DEQ or builder.	Ongoing
		Provide information to builders about the 1200C Program.	Include fact sheet from DEQ with building permits.	Staff reports fact sheets have been included for builders.	Implemented September 2008		Ongoing
	5. Wastewater Treatment Plant Discharge	Ensure effluent quality meet and exceeds the requirements contained in the NPDES Permit.	The City spent \$8.5M to implement new technology and process improvements.	Verification of 1200C compliance as needed.	Ongoing	-	Ongoing.
		Daily testing & monitoring.	Monthly and Annual reporting is completed.	Staff reports daily.	Ongoing	-	Ongoing

POLLUTANT	SOURCE	STRATEGY (What we are doing and will do to reduce pollution from this source)	ACTIONS (Specific ways to implement strategies)	MEASURE (How we will track successful implementation or completion)	TIMELINE	STATUS	UPDATE
Mercury	1. Erosion and sedimentation	Erosion control required under ODEQ NPDES Permit Program for new and redevelopment.	Continue assuring that developers obtain permits when required.	Ongoing	Ongoing	Erosion Control requirements revised if needed and adopted by the City. Public Works Standards adopted 2015.	Ongoing
		Assist developers of individuals lots in larger developments to minimize erosion and runoff	Revise building permit review process to include providing builder with a copy of the 1200-C plan.	Staff reports plans have been included for builders.	Implemented 2008 & Ongoing	Receive 1200-C plans from DEQ or builder.	2016: Lepman & Associates
		Provide information to builders about the 1200-C Program.	Include fact sheet from DEQ with building permits.	Staff reports fact sheets have been included for builders.	Ongoing	Ongoing.	2016: Lepman, Dollar General, Wenger Construction.
		Consider implementation of ordinance language addressing development practices on steeper slopes	Review model ordinances and other ordinances for applicable provisions that could be adopted by the City.	Completed review of model and other ordinances.	Implemented 2010	Review completed, adoption of selected ordinance language / BMP	Completed
	2. Stormwater BMP's	Encourage building standards which encourage filtration through riparian's, swales, and other BMP's for building design.	Review model ordinances and existing ordinances from other cities to determine if any measures can be implemented with existing resources. Adopt by ordinance those measures deemed by Council to be applicable and within city's resources to implement.	Best management practices adopted and distributed to residents and developers to reduce Mercury pollutants.	Implemented 2012	Short Term: Review of existing practices by staff. Long Term: Adoption of BMP's where applicable.	Completed
		Inform residents of potential sources of mercury contamination to sewer systems.	Look for opportunities through ODEQ and other sources for educational materials available to share with residents regarding mercury reduction.	Distribute information to residents via semi-annual newsletter and website.	October 2008. Ongoing training.	Residents informed.	Ongoing. 2016: Council Newspaper Articles
Temperature	1. Riparian Vegetation	Protect existing riparian vegetation.	Ensure the mature tree canopy and vegetation is maintained as needed.	Inspection & routine, ongoing maintenance of the park abutting the Calapooia River.	Ongoing	Staff ensures the park is maintained at a very high level. Council has decided to maintain the 'wild' nature of the vegetation to help the river ecosystem.	Ongoing.
	2. Education	Inform residents of significance of riparian areas and measures they can take to improve water quality. Wetland workshops.	Provide information to residents via City Newsletter, make material available on City website. Partner with Calapooia Watershed Council to sponsor community meetings.	Newsletter developed, distributed, and available. Website updated.	2019: Build Meaningful Partnership with Calapooia Watershed Council.	Newsletter material distributed. Presentation created.	Preparing for 2019 Education Effort
	3. Wastewater Treatment Plant Monitoring	City discharges during cool temperature months of November - March only. Maintain low effluent temperatures.	Meet requirements of NPDES permit. Staff measure the pH & temperature of the Calapooia River and the City's effluent every day.	Discharge occurs under permit conditions only.	Ongoing.	Compliance ensures effluent does not harm the river.	Ongoing. 2017: New NPDES Implemented
	4. Tree City	Maintain the requirements of the Tree City USA designation by properly caring for and planting trees throughout the community with special focus on riparian areas.	Monitor tree health during regular system maintenance and monthly meter reading.	Continue to check tree health and plant necessary trees.	Ongoing.	Actively working.	Ongoing

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	5. Park Master Plan	The Parks & Open Space Advisory Board recently adopted a revised PMP.	Implement the plan as resources allow.	Plant trees and monitor tree canopy health Do not install engineered bank to prevent the riverbank erosion.	Ongoing.	Actively working.	Ongoing
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POLLUTANT	SOURCE	STRATEGY (What we are doing and will do to reduce pollution from this source)	ACTIONS (Specific ways to implement strategies)	MEASURE (How we will track successful implementation or completion)	TIMELINE	STATUS	UPDATE
Illicit Discharges	1. Intentional Dumping	Public education	Inform public of rules regarding disposal by including articles in City newsletter, material on City website, literature available at City Hall lobby.	Articles completed, website additions completed, handout material acquired.	Ongoing	Ongoing	2017: New Effort
		Enforcement	Educate public on how to report illicit dumping. Staff training on how to detect illicit dumping.	Staff training completed, public information campaign done.	Implemented 2010	Ongoing	2017: New Effort
	2. Accidental or Unintentional Dumping	Public education	Educational material provided at City Hall, through newsletter and website to inform public of how to avoid or report any accidental discharge.	Articles completed, website additions completed, handout material acquired.	Ongoing	Ongoing	2017: New Effort
		Identify Stormwater catch basins and label to educate public.	Label and stencil storm drain catch basins to identify them as Stormwater system and inform public that they drain to streams.	Labeling completed.	December 2017	All basins properly marked	2017: New Effort

POLLUTANT	SOURCE	STRATEGY (What we are doing and will do to reduce pollution from this source)	ACTIONS (Specific ways to implement strategies)	MEASURE (How we will track successful implementation or completion)	TIMELINE	STATUS	UPDATE
All Pollutants	1. Stormwater Education	Public education	Increase Website Effort.	Create Documents, Links and all things TMDL.	June 2019	In Progress	2018: New Effort City is working on content for the new, redeveloped website.
	2. Public Works Operations	Street Sweeping Pioneer Park Leaf Collection Leaf Burning	Continue contract for sweeping services. Continue Annual Park Clean-Up. Citizens Collect & Dispose of Leaves	Ensure monthly sweeping is carried out per contract. Annually clean-up Park. Fall Seasonal Work.	Ongoing Monthly Ongoing Annually Ongoing Annually	Actively Ongoing In Progress In Progress	Continuing Efforts
	3. Council Support	Keep Council abreast of the program and implications. Regularly review the Drainage Master Plan, the Water Master Plan, Park Master Plan, and the condition of the Calapooia River.	Bi-annual meetings specifically to TMDL. Monthly meetings focusing on the City Treasury. Implementations of Capital Improvements Plan while addressing pressing concerns with infrastructure.	Monitor progress through reporting as items are completed. Council has a goals board which is updated every four months as to progress made.	February 2019 through February 2021	Goal Setting Sessions are being planned	Continuing Effort
	4. Staff	Council requires Staff to continue work on TMDL and related topics.	Update plans as needed, forward necessary regulations as planned, continue implementation of applicable policies and strategies adopted by Council.	Reports from Staff monthly and through the year.	Ongoing	Tracked and scheduled as required.	Continuing Effort