

# City of Springfield

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## TMDL Implementation Plan Ninth Year Annual Report 17-18

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Franklin Blvd. Roundabout Swale 2018

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July 1, 2017 thru June 30, 2018





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## **Purpose**

This document fulfills the requirements for annual reporting of progress towards meeting the long term goals of the City of Springfield's Total Maximum Daily Load Implementation Plan (TMDL IP), as required by the City's TMDL IP dated April 2014, approved by the Oregon Department of Environmental Quality (Oregon DEQ) May 2014, and provision OAR 340-042-0080 (3) of the Oregon Administrative Rules addressing non-point source pollution.

The purpose is to document progress through the tracking of goals set forth in Springfield's TMDL IP and to present modifications and amendments through adaptive management of the plan.

Under its first TMDL, Springfield was required to perform a 5 Year Review Report and submit another 5 year plan to the DEQ by April of 2014. The City drafted and submitted its 2014 TMDL IP and 5 Year Review to the DEQ in March of 2014. The DEQ determined that since Springfield had just submitted the 5 Year Review and its new Plan that it was not necessary to submit an additional Annual Report in 2014. The Sixth Annual report was submitted in October of 2015, the seventh report in Sept 2016, and the eighth report in October 2017. This Annual Report is Springfield's ninth report and covers the time frame from July 1, 2017 to June 30, 2018. The report is due to the Oregon DEQ by November 1st, 2018.

Springfield submitted its application for the City's MS4 permit renewal June 30, 2011. At that time, the DEQ was considering including TMDL pollutants and their waste load allocations (WLA) as part of the MS4 permits best management practices (BMP's) for pollution reduction by using qualitative or quantitative benchmarks. Springfield's TMDL IP was incorporated into the proposed Stormwater Management Plan (SWMP) that was submitted with the renewal application for its MS4 permit. TMDL goals and tasks were incorporated as part of the Minimum Control Measures and BMP's. Springfield is still under an administratively extended permit status and is not expected to receive its MS4 Permit renewal until 2019 or later. Springfield will continue to submit copies of the Annual Reports covering the time frame from July 1st to June 30th of each year to the MS4 Stormwater Coordinator. This dual reporting will continue until Springfield is advised otherwise.

## **Background**

The Oregon DEQ set water quality standards to protect waterways in the region for beneficial uses such as domestic drinking water supply, fishing, water contact recreation, fish spawning, and irrigation. Streams, lakes, and rivers that do not meet these standards are included in a list of impaired water bodies. This list, developed in response to Section 303(d) of the Clean Water Act, is referred to as the "303(d) list" and contains the names and descriptions of waterways, or

sections of waterways, that have failed to meet state water quality standards for one or more listed pollutants.

Both the McKenzie and Willamette rivers fail to meet state water quality standards for temperature. The Willamette also fails to meet water quality standards for bacteria, and through a complex analysis, has been listed as not meeting state standards for mercury. Springfield's public stormwater drainage system discharges to both of these rivers.

The Oregon Administrative Rule (OAR 340-042-0025) that addresses TMDLs requires local governments, agencies, or major facilities to develop TMDL Implementation Plans for 303(d)-listed waterways within their jurisdiction.

### **Regulatory Context**

This report is submitted to the Oregon DEQ to satisfy the requirements of OAR 340-042-0080 (3)(a)(C) *Provide for performance monitoring with a plan for periodic review and revision of the implementation plan.* All Designated Management Agencies (DMAs) are expected to “implement and revise the plan as needed” [OAR 340-042-0080 (3)(b)].

### **Reporting Requirements**

This Annual Report is required to include the progress and/or status of Springfield's TMDL Implementation Plan, 2014 and its measureable goals. Oregon DEQ refers to this type of monitoring as implementation monitoring and the progress report as an Annual Report. The City of Springfield has chosen to use the **TMDL Implementation Tracking Matrix** as a tool for describing, tracking and reporting TMDL implementation efforts listed under its Plan.

The Implementation Tracking Matrix (Table 1) will provide information about each strategy, implementation methods and progress or status in meeting the plan's goals.

While the Implementation Schedule presented in the Implementation Tracking Matrix is realistic, unforeseeable events can and do occur: budget shortfalls, staffing limitations, and changing priorities can impact the rate or success of implementation.

The City is continuing to implement existing programs and further projects and goals under the 2014 IP. Some current projects and programs the City undertakes do not have a listed goal or directly related task. Therefore, the City is including additional tasks relevant to address the City's WLA for temperature, bacteria, and mercury.

Pending the MS4 General Permits final language, some of the current programs and projects that are currently being implemented for illicit discharge, SSO response, code reviews, post-

construction management, assessments, construction site runoff, and public education and outreach, may change direction or be eliminated. These changes, if any, will be implemented through the Adaptive Management process and submitted to the DEQ TMDL Basin Coordinator upon development.

### **Summary of Work Accomplishments**

This section is a brief summary of the work that has been done in the reporting period for each of the pollutants. See Table 1 TMDL Implementation Tracking Matrix for completion status.

#### **Temperature:**

- T1 - Inventory Existing and Potential Shade and Enhancement Areas
  1. Maintain priority project list; review and update.
  2. Work to develop partnerships; continue to explore options.

#### Summary:

- A desktop assessment and a priority list have been completed. This was accomplished in year 1 reporting. This effort is being continued with a channel restoration priority project list and is incorporated into the City CIP process. A review of the assessment and list was completed January 2017 and reported in the previous annual report. No actions were required during this reporting period.
- Continued work on potential sites for shade planting – The City hosted 11 Stream Team events of which 7 events included planting trees and shrubs along waterways and water quality facilities; 1,435 trees/plants were planted. These events included community groups, Willamalane Park District, United Way, and HOA's. Additionally, 15 native plants were provided to citizens that attended workshops or other events.
- The Mill Race Restoration Project Phase 1 is complete. Shade planting was a priority at this site with canopy trees being planted along the channel banks. Phase 2 of the project, the pond/wetland areas, has been completed with canopy trees being planted along the main channel. This project is in the O&M stage with ongoing maintenance and vegetation monitoring. Temperature probes were installed and monitoring continues, Operations cleared 28 ac. of invasive plants, and vegetation and a shade cover assessments were completed.
- A stormwater treatment park along the north bank of the Mill Race has been completed. This facility will also provide education via signage and a trail system. The treatment park enhanced this area greatly by converting an open industrial area full of invasive plants into a natural vegetated and treed facility. Additionally, providing pre-treatment and cooling of industrial and stormwater runoff before it enters the Mill Race. There will be a monitoring project that will look at the temperature and other pollutants, pre and post treatment at this site in

the next year or two. Staff is waiting for vegetation to be fully established, a plan is in the development stage.

- The multi-use path along the Mill Race and Stormwater Treatment Park is completed. This trail system runs along the top of bank of the Mill Race and begins at the treatment park; it too had native vegetation and trees added in place of the invasive species removed. Educational opportunities will be incorporated into this trail system in the future. Staff worked on interpretive sign design; installation will fall into the next reporting period.
  - The Mill Race Treatment Park and Multi Use Path were featured in the national magazine *Stormwater Magazine* in October 2017.
  - The Channel 6 Stormwater Master Plan continues with work being implemented on items, such as floodplain mapping, surveys, and hydraulic modeling. CIP design and construction phase initiated with work to begin in June 2018. This project will incorporate a series of treatment swales, invasive plant removal, and native vegetation and trees planted. Currently this system is filled with invasive grasses, has little to no canopy, and is clogged with sediment.
  - The 48<sup>th</sup> Street Channel restoration project continues with design work, and site visits. Project coordination for this reporting period involved moving forward with an implementation action plan and securing funding and agreements. Design work was completed for a pre wetland filtering trash rack; installation expected late 2018.
  - Planting is completed at the City lot along the Mill Race at S. 39<sup>th</sup> Street; this site is in the monitoring stage; there were no replacement trees needed this year. A multiuse path and trailhead entrance is expected to go through this area; trees were added to the perimeter of the site in preparation of future use.
- T2 - Riparian Area, Parking Lot, and Streetscape Shade Enhancement
    1. Code review and evaluation for parking lot, streetscape, and riparian shade and vegetation management; review development code and amend if appropriate.
    2. Mill Race maintenance and enhancement; continue to explore funding options and identify projects.

Summary:

- The major review of the Springfield Development Code to include new technology, designs and ideas for improving water quality was completed under the first TMDL Plan. Low Impact Development Approaches, Engineering Design Standards and the Development Code continue to be reviewed and improved upon to optimize shading, address pervious pavements, and stormwater discharge alternatives. A review of existing Codes and Standards pertaining to riparian areas, parking lots, and streetscapes was conducted and found to be acceptable and in compliance. A final review, and updates as necessary, will be completed

after the DEQ issues the new Phase II General Permit. There was no TMDL goal to be implemented during this reporting period.

- A review of the Springfield's Engineering Design Standards and Procedures Manual for chapters pertaining to water quality facilities, water quantity, facility design, vegetation and tree standards, and riparian enhancement, was put on hold pending the DEQ's issuance of the new Phase II General Permit. Currently no changes are needed.
  - Staff continues to work with developers, through the development review process, on providing large canopy trees, maximizing vegetative treatment and/or incorporating additional vegetation into planned project sites
  - A new streetscape project called the Virginia Daisy Bikeway is in the design stage. This project will incorporate a skinny green street design with trees, swales, and a bike path.
  - As mentioned above, the Mill Race Restoration Project is in the O&M stage with ongoing maintenance and vegetation monitoring. A stormwater treatment park, a multiuse path, and parking entrance at a trailhead have been completed and reported the last reporting period. These areas incorporated lots of new trees and native vegetation. Additionally, the projects were featured in *Stormwater Magazine* (October 2017).
  - Additional work was completed to enhance the Over/Under Channel at the end of the system; banks were laid back and native vegetation added. The area was depleted of native vegetation and trees. Construction was completed during this reporting period. Additionally, an area that was considered a dysfunctional swale was reconstructed and revegetated per current development code which requires installation of trees and shrubs. This swale was currently wide open with invasive plants. This swale project is near completion.
  - The Mill Race O&M requirements were met by staff conduction vegetation and canopy assessments. This O&M requirement will continue into the next reporting period.
  - The Franklin Boulevard Redevelopment Project was completed. This redevelopment included re-landscaping a bleak industrial corridor with vegetated round-a-bouts, vegetated park strips and medians with trees, and water quality facilities in and along the corridor. It includes three large infiltration swales, numerous other smaller street side infiltration swales, and pervious pavement.
- T3 - Manage Industrial Warm Water Discharges
    1. Continue to work with industrial sources to address warm water discharges.

Summary:

      - Staff continues to review 1200z permits and Pollution Control Plans for industries in Springfield's jurisdiction. In 2017 the DEQ issued a new 1200z permit that now no longer provides for public comment. Staff solicited all industries within

Springfield's jurisdiction for updated pollution control plans during the reporting period.

- The Water Quality Facility Management Program continued to inventory, inspect, and enforce compliance for both public and private sites. Some of the private sites are industrial sites with warm water discharges; this program ensures compliance with water quality and discharge standards by visiting these sites on a routine basis and noting any warm water discharges.
  - Staff completed an assessment of industrial and commercial sites in the last reporting period; over 600 businesses within the UGB were identified and ranked based on a list of criteria which influence the site's potential to pollute. Outreach to storage and business park facilities and asphalt companies were conducted as a result of this assessment. Staff identified washing activities using soaps, chemical, and warm water as a concern at these types of facilities.
  - Under the first TMDL IP, educational outreach materials were developed and distributed to mobile pressure washing companies, pressure washing rental companies and home improvement centers that sell pressure washers. The material addresses warm water discharges and City regulations. Outreach material goes through an annual review process, the intention of the review is to ensure they are up-to-date and provide the target audience with the best management practices for warm and/or polluted water.
- T4 – Public Outreach and Education  
Summary:
    - Staff continues to revise and update existing education and outreach materials and participate in clean water classes in schools and community events such as; Earth Day, Regional Pressure Washing Campaign, Fish Friendly Car Wash Kits, Public Works Week, Career Day, Youth Day of Caring, Lane County Home Show, BRING Tour of Homes, and garden shows.
    - A Clean Water Garden booklet series that focuses on water harvesting, stream side gardening and riparian planting continues to be popular for home owners and residents. Information on temperature as a pollutant and canopy tree planting is included in the material. A review of the material was completed and material updated as appropriate. The booklet series continues to be distributed in stores and at events.
    - Staff posted 54 door hangers in neighborhoods that had high occurrences of yard waste dumping which kills vegetation, exposes banks, and increases stream temperature.
    - Educational material has been developed and continues to be distributed to mobile pressure washing companies, pressure washing rental companies and home improvement centers that sell pressure washers. The outreach material addresses

warm water discharges and City regulations. Staff reviews and updates the material as appropriate.

- IDDE response, educational outreach, and enforcement continued in response to temperature related discharges and vegetation removal or dumping.
- School workshops continue to include temperature as a pollutant discussion and the importance of tree shading along banks of streams. A total of 263 Springfield students attended classes. In the summer of 2018, staff redesigned the Clean Water University Program to include wastewater education and now includes Eugene's 4J and Bethel school Districts.
- The Mill Race treatment pond has been constructed. Staff began working on the educational signage component, which will be a series of interpretive signs along a path, treatment swale, and wetland areas. Information on temperature and riparian vegetation will be included. The treatment pond collects industrial and commercial runoff and will aid in cooling and treating the water before discharging into the Mill Race and the Willamette River.
- The pollution prevention educational portfolios were updated and restocked. These portfolios contain education and outreach material easily stored in key City vehicles. Some of the factsheets address warm water as a pollutant.
- Flyers and Fish Friendly Car Wash Kits went out; 10 flyers sent to schools, HOA's, and churches and youth groups. Car washing water not only contains warm water but also soaps, chemicals and oils.
- The Water Quality Facility Management Program provides outreach and educational information with every condition report. Staff stresses the importance of a canopy and shrub coverage in water quality facilities.
- The City's Up Stream Art project had its second successful year. Advertisements, media spots, social media feeds, and staff interview all provided an opportunity to discuss stormwater and temperature pollution; the art as well sends a message out daily.

The goals and tasks for temperature reduction as outlined in the 2014 TMDL IP are all on track. Pending the MS4 General Permit final language, some of the current programs and projects that are currently being implemented for illicit discharge, code reviews, post-construction management, construction site runoff, and public education may change direction or be eliminated.

**Bacteria:**

- B1 - Sanitary Sewer Overflows (SSO) - Work Practices
  1. Review standard operating procedures for spill response: amend as necessary.
  2. Review contractor work provisions; amend as necessary.

Summary:

- SOPP's related to SSO procedures and protocols have been reviewed, updated and adopted for City staff and are included in contractor provisions. The City continues to evaluate and adaptively manage its procedures and policies as needed, coordinating efforts with the Development and Public Works Operations Division, Police, Fire and Environmental Services staff. IDDE staff reviewed all SOPPs, and program documents. Updates to protocol, staff changes, and contact information were made to reflect the most current information. The program description was updated during this reporting period as well. Additional updates may occur next reporting period pending MS4 General Permit language revisions.
  - SSO and SOPP procedures and protocols continue to be reviewed as needed and/or after an incident. Springfield continues to place high emphasis on providing the proper handling and reporting procedures to staff and regulatory agents in responding to any SSO within its jurisdiction.
  - Contractors working on new or existing sanitary systems under City supervision continued to be provided with information for proper reporting. Staff discussed additional outreach options. Some of these options may be implemented next reporting period but are on hold pending the MS4 General Permit language revisions.
  - IDDE and Operations staff continue to respond and address bacteria related discharges as they are identified. Staff responded to zero SSO's during this reporting period.
- B2 - Animal/Pet Waste - Program Enhancement
    1. Continues to work with local partners to identify locations for pet waste stations; install and maintain stations.
    2. Continue to identify pet care facilities and review waste management practices; update facility list and continue to distribute edu. materials.
    3. Continue pet waste education and public events; identify options for material distribution and update material as needed.
    4. Wildlife feeding outreach; identify locations, appropriate outreach methods, and explore options of a wild life feeding ordinance.

Summary:

- During this reporting period, discussions with Willamalane Parks and Recreation District, Springfield School District19, and City Operations Division staff identified additional locations for pet waste stations or bag dispensers. Stations and dispensers continue to be installed as locations are identified; one new station was installed. Staff and partners continue to monitor existing stations, replace bags and evaluate new locations. A total of 4,600 bags were distributed during this reporting period.

- In previous years, pet parks, kennels, pet supply stores, and pet daycare facilities have been identified and outreach material developed. City staff continues to work with facilities on waste handling and problem areas as needed. Staff updated the pet service providers list.
  - Pet supply stores have been identified and outreach material developed and continues to be distributed in stores. Educational material continues to be monitored, stocked, updated and replaced as needed. A total of 397 pet waste management brochures were distributed during this reporting period.
  - Pet waste management education at public events is ongoing as is the City’s participation with regional outreach groups. Staff continues to participate in public events such as the Lane County Home Show, Willamalane Pet Fest, Spring Clean-up, Canines for Clean Water pledge events, and Regional Pressure Washing Campaign.
  - The “Canines for Clean Water” program continues to be a success. Springfield residents submitted photos for the 2019 contest and pledged to pick up after their pet. The 2019 calendar contest drew 353 pledges. The contest was promoted through social media. Four public booth events were held during the reporting period; 190 pledges were made, and 365 bag holders, 188 bandanas, and 119 yard signs were distributed to the public. The Canines for Clean Water Calendar continues to be a hit as well; 4,600 calendars were distributed at local pet stores and other locations.
  - Discussions have continued with Willamalane Parks and Recreation District staff and the City’s Operations staff regarding waterfowl and nutria feeding. “Please don’t feed the wildlife” signs had been developed under the last TMDL Plan and continue to be installed at problem locations to deter animal feeding; 3 new signs were installed in local parks during this reporting period and 2 additional possible locations were identified. A total of 16 door hangers were posted in problem areas. The City is working with Willamalane to install a large informational sign at Island Park, the City’s main location where waterfowl are fed, to help discourage residents from feeding. The sign has been designed and will be installed in the next reporting period.
  - Staff explored the development of a wildlife ordinance during the last reporting period. It was decided that education and outreach should remain the primary tool for encouraging the desired behavior.
- B3 - Septic Tank, Transient Camping & Private Sanitary Infrastructure Outreach & Edu
    1. Maintain septic tank inventory program; maintain inventory, update edu. materials, and work with property owners to provide sanitary services.
    2. Continue investigation into illicit commercial waste disposal practices; continue to identify targeted audiences.

3. Review transient camping procedures; update as needed, work with property owners, and assess known sites.

Summary:

- The septic tank inventory within the City limits is complete; sites continue to be added to the inventory when discovered, or removed when connected to the City sewer system.
  - During this reporting period, three septic systems were decommissioned and connected to the City sewer system.
  - The septic system guide for homeowners was updated during the last reporting period and was mailed out to all property owners and residents in the Urban Transition Zone. This reporting period there were two brochures handed out; typically we update and mail the brochures every three years.
  - Two sanitary sewer extension projects were completed during this reporting period; Franklin Blvd and the R St extension near 9<sup>th</sup> Street. Both projects installed public sanitary systems in areas that were currently served via septic systems.
  - The assessment of commercial bacteria waste was completed last reporting period. Six potential bacteria sources were identified with educational outreach and site assessments implemented for some of the sites. The list was updated during this reporting period.
  - A list of known chronic transient camping sites has been developed and continues to be updated and sites monitored. Sites that have a negative impact on health and/or water quality are cleaned up first, on a priority basis as funding allows. Code Enforcement currently works with private owners who wish to deter campers. Multiple sites have been cleaned up along the rivers and local waterways. Sites will continue to be monitored, assessed, removed as needed, and discussions between internal agencies continue. During this reporting period 99 camps were reported, 3 assessments were completed, 206 staff hours spent cleaning up, and 1 large inter-agency cleanup took place. City staff participated in the annual Willamette River Clean Up. Additionally, a review of procedures and codes was done.
- B4 – Public Outreach and Education
- Summary:
- Staff continues to revise and update existing education and outreach materials pertaining to bacteria; an evaluation of the educational material was completed with materials being updated. Staff continues to participate in activities including: Clean Water classes in elementary and middle schools, participation in Earth Day, update of materials for the Regional Pressure Washing Campaign, update of the pet waste brochure for pet stores, participation in Environmental Education field sessions, and participation in Public Works Week.

- Implementation of a “Canines for Clean Water” program has proven to be well received and a good way to spread the message. It will continue to be an active program within budget and staffing constraints. See B2 above for additional information on the program.
- Pet supply stores have been identified as outreach distribution sites and will continue to be stocked with materials and event information. A review and update of the pet services list was completed and 397 brochures distributed.
- Clean Water University provided classroom and hands on education on water quality. Fall and Spring sessions were held with 263 students (each class completes 4 one-hour workshops).
- The City’s Little Litter Campaign is ongoing; 16 flyers were distributed. This campaign focus on the small litter that is taken for granted such as cigarettes butts, gum, wrappers, food, cans and bottles, plastic, disposable diapers, wipes, etc. Staff contacted LTD (regional public transit) about running another “back of the buss” ad. The ad will run in the next reporting period (August/September 2018).
- Four illicit discharges that involved private sanitary waste were responded to and eliminated.
- All outreach and educational material went through a review and update process.
- The IDDE response staff continues to hand out factsheets about bacteria waste such as pet waste, the Upstream Art Project included discussions and information to the public about pet waste, septic tank maintenance brochures reminds owners to routinely maintain their systems, and staff continues to post signs and educate the public about wildlife feeding.
- The City’s Up Stream Art project had its second successful year. Advertisements, media spots, social media feeds, and staff interview all provided an opportunity to discuss stormwater and bacteria pollution; the art as well sends a message out daily.

The goals and tasks for bacteria reduction as outlined in the 2014 TMDL IP are all on track. Pending the MS4 General Permit final language, some of the current programs and projects that are currently being implemented for illicit discharge, SSO response, code reviews, post-construction management, assessments, and public education may change direction or be eliminated.

**Mercury:**

- M1 - Limit Construction Site Erosion
  1. Review and update the LDAP Program as needed.

Summary:

- The Land Drainage and Alteration Program (LDAP) staff continues to monitor and work on streamlining the permit process. Municipal code addressing LDAP

code and erosion concerns was developed, adopted by Council, and implemented previously. No changes were made during this reporting period due to the MS4 General Permit development; substantial program changes may be needed.

- Springfield continues to implement permit and program compliance that meet 1200-CN NPDES permitted activities within the City Limits. Reporting data pertaining to 1200-CN permits is included in Springfield's MS4 Annual Report, dated October 2018. The LDAP staff previously conducted a review of the LDAP program; their "LDAP Program Guide Book" and erosion and sediment control educational materials were updated. No additional updates during this reporting period due to uncertainty of new MS4 General Permit language. Staff did review and update related education and outreach materials.
  - The City continues to maintain CESCL certification for two LDAP staff, two Water Resource Staff, and one Operation's staff obtained their CESCL certification.
  - LDAP program inspection and compliance continues to provide ESC enforcement and compliance.
- M2 - Enhance Post Construction Support
    1. Continue Water Resources staff participation in plan review process.
    2. Continue to implement a post-construction program.

Summary:

- Water Resource staff continues to be active in Development Plan Review, Pre-Development Review, and Pre-Construction meetings and process.
- A Water Quality Facility Inventory and Inspection Program to ensure long-term O&M of facilities is ongoing. Inventory collection and mapping is ongoing and inspections continue. The Post-construction inspection program started in July 2010, inspections occur every year during the summer months starting in July. Inventory mapping occurs just prior to inspections and is ongoing as new facilities are constructed or identified. Reporting data pertaining to the WQF Management Program is included in Springfield's MS4 Annual Report, dated October 2018. The existing level of effort for this program will be reviewed pending the MS4 General Permit language. Potential General Permit language could have a major impact on the amount of facilities that are subject to construction and inspection, thus a different approach to implement this program will be needed.
- Springfield's reduced SDC Program for installing rain gardens or rain water harvesting systems in residential builds continues to be offered as an incentive to builders and homeowners. One residential rain garden went in. These sites are tracked in the City construction/permit database. This program may be dropped as a result of the new MS4 General Permit language.

- A review of the City’s EDSPM Chapters 3, 4, and 6 (design standards for water quality, stormwater management, and vegetation) is on hold pending MS4 General Permit language revisions.
  - Water Resource staff currently participates in major infrastructure and Code update projects; The Franklin Blvd Redevelopment, the UGB Expansion, and the Downtown District Design Project. All projects have either implemented or will implement design standards specific to their areas that pertain to water quality and LID approaches.
- M3 - Evaluate/Enhance Street Sweeping, Catchbasin, and Pipe Cleaning Programs
    1. Review street sweeping, CB cleaning and storm pipe clean programs; adaptively manage.

Summary:

    - The review and adaptive management of the street sweeping, catchbasin & pipe maintenance programs, and equipment evaluation and scheduling is an ongoing task. The Operations Division continues to implement the programs as staffing and resources allow. The latest evaluation was done in March-April of 2016; there are no additional goals for this reporting period.
    - Currently, the City has two mechanical sweepers that are concentrated in the residential areas, which are swept about 4-7 times a year. One regenerative air sweeper is assigned to arterial and collector sweeping. Depending upon traffic patterns, some streets are swept weekly and some every two weeks. Over 5,165 curb miles of routine sweeping took place.
    - 1,281 catch basins were cleaned removing 81 tons of material.
    - Over 2,432 feet of storm line was cleaned and ditch reshaping/sediment removal was done on over 5,316 ft. of system with 79.63 tons of material removed.
  - M4 - Hazardous Waste Control
    1. Identify sources of mercury pollution and determine what type of projects can be implemented.
    2. Use household waste collection events to reduce the improper disposal of waste containing mercury.

Summary:

    - Staff researched sources of mercury and mercury pollution and what household products, electronics, and appliances may contain mercury last permit cycle. Staff determined an educational brochure should be developed. Staff developed the brochure during the 15/16 reporting period. A total of 12 brochures were distributed during this reporting period.
    - Development and Public Works continues to hold the annual Springfield “Spring Cleanup” event that collects electronics and other waste for recycling and proper

disposal. Over 6 tons of electronic material was collected. The City continues to be an active member of regional groups that address household hazardous waste.

- ESD staff continues to participate in the Regional “Eco Biz” Program that addresses and promotes recycling and spill control with local auto shops. The City’s Fleet Maintenance Facility continues to maintain its Eco-Biz Certification.
  - Not all Auto Shops can achieve State Eco-Biz status, but may qualify as a “Clean Water Business” through the City program. Both programs promote recycling, and proper storage of hazardous material. The Eco-Biz program had one recertification, 2 inspections, and conducted 3 site visits. The list of facilities was updated and the education and outreach material distributed. This program also may be discontinued pending the MS4 General Permit language revisions. The Clean Water Biz materials and facility lists were developed. Initial site contact occurred in the next reporting period.
  - Springfield’s Industrial Pre-treatment Program is working in collaboration with DEQ and ACWA to implement the requirements of the new effluent limitation guidelines and standards for the Dental Category 40 CFR Part 441. This includes identifying and tracking new and existing sources from dental dischargers and providing outreach about the rule leading up to the October 12, 2020 deadline for submission of the one-time compliance report from all dental facilities in the service area. The City will retain those certifications in accordance with the standard records retention protocol for the pre-treatment program.
  - A drug take back box for unwanted pharmaceuticals was installed at the City Police Department in previous years. Although the drug take back box does not directly affect the collection of mercury it has been very effective in collecting and removing pharmaceuticals from the waste stream and heightening people’s awareness. Some pharmaceuticals can or do contain mercury, but the city does not track that information. One regional drug take back round up event was held.
- M5 – Public Outreach and Education  
Summary:
    - Staff continued to revise and update existing education and outreach materials. The LDAP Program updated all of their erosion and sediment control factsheets and posted to the City webpage. All the education materials were reviewed and updated as needed during this reporting period.
    - As mentioned above, a mercury educational brochure was developed and brochures distributed.
    - Illicit discharge continues to be enforced. Electronics that are dumped are collected and taken to a local electronics recycler for proper disposal.
    - The water quality facility management program continues to be implemented. Mercury and other heavy metal bind to sediment; having routine inspections and maintenance of facilities cleans out potential contaminated sediment. Postcards

are sent out every year reminding owners to maintain their facilities; proper O&M will ensure a healthy and fully vegetated facility which in turn will provide treatment, infiltration, and cooling of runoff. A total of 112 reminder postcards were sent out a little late this year; they were sent on July 5<sup>th</sup>.

- The City's Up Stream Art project had its second successful year. Advertisements, media spots, social media feeds, and staff interview all provided an opportunity to discuss stormwater pollution; the art as well sends a message out daily.

The goals and tasks for mercury reduction as outlined in the 2014 TMDL IP are all on track. Pending the MS4 General Permits final language, some of the current programs and projects that are currently being implemented for illicit discharge, code reviews, post-construction and construction management, and public education may change direction or be eliminated.

### **Adaptive Management Measures**

The Implementation Tracking Matrix includes target dates for the implementation of each of the measures included in this Plan. Where implementation of a particular measure is infeasible or unavoidably delayed, staff will evaluate the cause. Options include adaptively managing to facilitate implementation of the measure, developing an equivalent measure, or working with the DEQ to develop a strategy for accomplishing a similar result using an alternate method or schedule.

There are no adaptive management requests being made for this reporting period. Pending the MS4 General Permits final language, some of the current programs and projects that are currently being implemented may change direction or be eliminated in the next reporting cycle.

Implementation Matrix

The following matrix details the strategies that will be implemented within the five year cycle. The matrix displays the pollutant being addressed, the strategy to address it, when that strategy will be implemented, and how to measure progress and successful implementation

Table 1 - TMDL Implementation Tracking Matrix

| POLLUTANT   | SOURCE of POLLUTANT               | STRATEGY<br>What we are doing & will do to reduce pollution from this source | ACTIONS<br>Specific ways to implement strategies   | BENCHMARK<br>Intermediate indicators to know progress is being made   | TIMELINE                     | MEASURE<br>How we will track implementation & completion  | STATUS  |
|-------------|-----------------------------------|--|--|---|------------------------------|---|---|
| Temperature | Solar radiation to surface waters | T1 - Inventory Existing and Potential Shade and Enhancement Areas            | Maintain a priority project list for shading.  | Review and update the existing inventory identifying potential sites.   | By April 2017                | Revise priority list of potential sites.  | 100% completed<br><ul style="list-style-type: none"> <li>List maintained (CIP)</li> <li>Canopy Shade Assessment was reviewed; no updates at this time needed.</li> </ul>  |
|             |                                   |  | Work to develop public/private partnerships for demonstration projects.  | Continue to explore available options for partnering on shading projects.   | Ongoing throughout the cycle | Meet with selected groups and propose partnerships to implement shading projects.                 | 100% completed & Ongoing<br><ul style="list-style-type: none"> <li>QFW, Cedar Creek &amp; 72<sup>nd</sup> St. Channel, MR, Treatment Park, MR Path, C6, 48<sup>th</sup> St Channel</li> </ul>   |
|             |                                   | T2 - Riparian Area, Parking Lot, and Streetscape Shade Enhancement           | Additional code review, evaluation and enhancement for parking lot, streetscape shade and riparian vegetation management, setbacks and buffers, and retrofit practices if appropriate. | Review the Development Code with key planning staff and determine if shading or riparian protection amendments are appropriate. | By April 2016                | Review of Development Code for enhancement of riparian protection and impervious surface shading. | 100% completed<br><ul style="list-style-type: none"> <li>LDAP – Chapt. 8</li> <li>EDSPM updates (3, 4, 6)</li> <li>Downtown Design Codes</li> <li>Main Street Vision Plan</li> <li>Franklin Blvd</li> <li>Current Code and Standards list developed.</li> <li>Updates pending MS4 General Permit language.</li> </ul> |
|             |                                   |  |  | If amendments are appropriate, develop & propose to Council or work to include them in an amendment package.                    | By April 2018                | Proposals brought to Council.   | 100% completed<br><ul style="list-style-type: none"> <li>No changes made during this report period.</li> <li>Pending MS4 Permit Language – changes will be implemented as needed.</li> </ul>  |
|             |                                   |  | Mill Race restoration, maintenance, and enhancements   | Continue to explore additional or alternative funding options & sources.  | By April 2019                | Review and update projects, funding options and source list.                                      | 100% completed<br><ul style="list-style-type: none"> <li>MR O&amp;M</li> <li>MR Treatment Park completed.</li> <li>SW CIP process</li> </ul>  |

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|                 |                       |  |  | Work in identifying discrete projects that can advance overall restoration.   | By April 2018  | Review and update project list.  | 100% completed<br>• MR Multi-use path<br>• MR SW Treatment Park   |  |
|                 | Warm water discharges | T3 – Manage Industrial Warm Water Discharges                                 | Work with industrial sources and Oregon DEQ to address warm water discharges through the Industrial Stormwater NPDES permit program.                   | Staff will continue to work with industrial dischargers and State regulators to find acceptable management resolutions.   | Ongoing throughout the cycle   | Industrial Stormwater permits reviewed, comments provided, and technical assistance provided as needed.  | 100% completed & Ongoing<br>• 1200z permit review.<br>• Industrial permit holders SPCP request and update.                            |  |
|                 | Public Interaction    | T4 – Public Outreach and Education   | Continue to develop and distribute outreach and education materials to the public.   | Staff will continue to evaluate program needs and activities that effect water temperature. Staff will develop and distribute educational materials based on these evaluations. | Annually<br>Starting January 2015  | Continue to work with other agencies and independently to address activities that affect water temperature. Continue to develop and distribute educational material. | 100% complete 2015-2018<br>Ongoing 2019<br>• Updates to PE material, classes and events, IDDE response, Treatment Park Edu component. |  |
| <b>Bacteria</b> | Sanitary sewer system | B1 - Sanitary Sewer Overflows - Work Practices                               |  | Review relevant SOPPs for spills and overflows.   | By April 2016 – 1 <sup>st</sup> review<br>By April 2018 – 2 <sup>nd</sup> review                   | Review(s) completed  | 100% complete<br>• Review and updates completed.  |  |
|                 |                       |  |  | Review current standard operating procedures for spill response. Amend or revise if appropriate.  | Develop/amended SOPPs, if needed.  | By April 2017 and<br>By April 2019   | Approve and implement new or amended SOPPs if appropriate   | 100% completed (2017/18)<br>Ongoing (2019)<br>• Review and updates completed.<br>• Final review and update not needed till 2019 and pending new MS4 permit language. |
|                 |                       |  |  | Review contractor work provisions to ensure contractors understand Spfld. requirements for dealing with sanitary spills.  | Conduct review of relevant Springfield standard contracting specifications.                        | By April 2016  | Review of contract specifications   | 100% completed<br>• Review completed no updates at this time; pending MS4 General Permit language.   |
|                 |                       |  | Develop revisions, if needed   | By April 2017   | Adoption of new or amended contractor work provisions.   | 100% completed<br>• Review and updates completed; no amendment scheduled at this time.   |   |  |
|                 | Animal/Pet waste      | B2 - Animal/Pet Waste - Program Enhancement                                  | Coordinate with local partners to identify additional sites for pet waste disposal stations in public areas and assist with placement and maintenance. |   | Continue to collaborate with local partners to identify additional prospective pet waste stations. | By April 2015 and<br>By April 2018   | Update and maintain a list of possible locations.   | 100% completed<br>• List updated<br>• 2 new sites identified   |
|                 |                       |  |  |   | Continue to coordinate or otherwise assist with installation and maintenance of any new sites.     | By April 2016 and<br>By April 2019   | Installation and maintenance of new sites.  | 100% completed (2016-18)<br>Ongoing (2019)<br>• 1 new station installed<br>• 4,600 bags  |

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|           | Animal/Pet waste (cont.) | B2 - Animal/Pet Waste - Program Enhancement (cont.)  | Continue identification and waste management assessment of pet care providers and services.  | Continue to identify, review and update list of pet supply, service, and care facilities. Assess and develop outreach needs and options.                        | By April 2017                      | Update list of facilities and outreach needs and options.                   | 100% completed<br>• List maintained and updated<br>• Site distribution ongoing   |
|           |                          |  |  | Conduct assessment and/or make contact with participating owners/operators and track facility participation.  | By April 2018                      | Assess and/or contact participating facilities. Track participation.        | 100% completed<br>• List maintained/updated<br>• Site distribution ongoing<br>• Clean Water Biz program re-development and implementation. |
|           |                          |  | Continue pet waste outreach and education at public events and distribute outreach materials at pet-related businesses.  | Identify and review options for distributing outreach material such as brochures and hold Canines for Clean Water pledge events.                                | By April 2016                      | Update list of distribution sites and hold public events.                   | 100% completed<br>• List updated<br>• 4 events held  |
|           |                          |  |  | Review and update educational materials as needed.  | By April 2017                      | Review, revise, and approve current educational.                            | 100% completed<br>• Reviews completed  |
|           |                          |  | Wildlife feeding outreach and education.   | Continue to coordinate with the park district & City Operations staff to identify locations of wildlife feeding. Update list and where appropriate post signs.  | By April 2016 and<br>By April 2018 | Update list of locations. Post signs and distribute educational material.   | 100% completed<br>• 3 new signs – 1 new potential location<br>• Locations list updated   |
|           |                          |  |  | Explore development of a pest management program and adopting a wildlife feeding ordinance.   | By April 2017                      | Review done and options investigated.                                       | 100% completed<br>• Searched options and provided proposal.<br>• One survey.<br>• Decision to expand PEO and not implement ordinance.      |
|           | Sanitary wastes          | B3 - Septic Tank, Transient Camping and Private Sanitary Infrastructure Outreach and Education | Maintain a septic system inventory program for sites within the City limits; work with property owners to provide public sanitary services when feasible. Review, update, and deliver educational material as appropriate. | Maintain a septic system inventory within the City limits.  | Ongoing                            | Continued maintenance of septic system inventory and tracking database.     | 100% completed<br>• List maintained  |
|           |                          |  |  | Work with property owners within the City limits to provide public sanitary services when feasible. Continue to incorporate and extend services as appropriate. | Ongoing                            | Properties within the City Limits connected to public system when feasible. | 100% completed<br>• 3 sewer connections from septic<br>• 1 sewer extension   |
|           |                          |  |  | Review, update, and deliver outreach and educational materials to owners as appropriate.  | By April 2016 and<br>By April 2018 | Update and distribute outreach and educational material.                    | 100% completed<br>• Material updated<br>• 2 brochures  |

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|                    |                                    |  | Continue investigations into illicit commercial waste disposal practices.   | Continue to identify target audiences, and develop and distribute outreach material specific to them which incorporate BMPs and relevant regulatory requirements. | By April 2015 and<br>By April 2017                              | Identify additional audiences; develop and deliver educational material.  | 100% complete<br><ul style="list-style-type: none"> <li>Assessment document drafted.</li> <li>Target audiences identified.</li> <li>Material developed and distributed.</li> <li>Ongoing outreach.</li> </ul>  |
|                    |                                    |  | Review transient camping procedures, and focus additional efforts where sanitary waste or other waste impact open waterways. Seek enforcement through existing codes/statutes, as resources allow.    | Review and update procedures & priority site determination criteria with PD and Operations staff as needed.   | By April 2017   | Review and update policies and procedures, priority list, and tracking program.   | 100% complete<br><ul style="list-style-type: none"> <li>Review and updates completed.</li> </ul>   |
|                    |                                    |  |   | Work with land owners to enforce illegal camping regulations on private property.   | Ongoing throughout the cycle                                    |   | 100% complete<br><ul style="list-style-type: none"> <li>99 reported = 206 hours on cleanup</li> <li>1 interagency cleanup</li> </ul>   |
|                    |                                    |  |   | Assess known campsites on public land and update the priority list for removal. Continue to investigate campsite deterrent measures.                              | By April 2018   |   |  |
| Public Interaction | B4 – Public Outreach and Education | Review, update, develop, and distribute outreach and education materials to the public, as needed. | Staff will continue to evaluate needs, types of bacteria related activities affecting water quality, continue to develop educational material and distribution options.                               | Annually<br>Starting January 2015   | Develop/distribute materials and research distribution options. | 100% complete 2015-2018<br>Ongoing 2019<br><ul style="list-style-type: none"> <li>Reviews and updates completed.</li> <li>Distribution at events, classes, interpretive signs, participating stores, and at City Hall.</li> </ul> |  |
| Mercury            | Construction site soil erosion     | M1 - Limit Construction Site Erosion   | Continue to review existing LDAP construction site erosion control program, identify any additional program needs, and assist with program modifications or support to enhance program effectiveness. | Staff will review the LDAP program to determine if program revisions, enhancements, or modifications are appropriate.   | By April 2015   | Review of current program and updates made.   | 100% complete<br><ul style="list-style-type: none"> <li>LDAP Program Book</li> <li>Educational material</li> <li>Web site posting</li> </ul>   |
|                    |                                    |  |   | Work with the DEQ to re-new the IGA for construction activities within the City of Springfield.   | Target date by Nov. 2015  | City Council approval of IGA for construction activities.   | 100% completed<br><ul style="list-style-type: none"> <li>Staff participated in state wide permit review and renewal process.</li> <li>DEQ has not developed a new IGA; Spfld. will not be signing an IGA.</li> <li>Spfld will continue to implement a 1200C equivalent program within its jurisdiction.</li> </ul> |

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|           |                         | M2 - Enhance Post Construction Support  | Continue Water Resources staff participation in plan review & expand Water Resource staff involvement in the approval process.   | Continue involvement by engaging in the review process for proposals requiring engineering review and/or smaller scale developments that include water quality or LIDA.  | Ongoing throughout the cycle    | Involvement in the review process for developments having WQ and/or LIDA proposals. | 100% complete<br>• Site plan reviews are ongoing as development occurs.   |
|           |                         |   | Continue to implement a post-construction BMP inspection program to ensure maintenance of WQ BMPs at private sites.  | Review program needs, available staff, and resources.  | By April 2016                   | Assessment of program, staff, and resource needs.                                   | 100% completed<br>• Ongoing program management.<br>• In field collector app development.  |
|           |                         |   |  | Continue program implementation within resource limitations.   | Ongoing throughout the cycle    | Continue implementation of a Stormwater Facility Management Program.                | 100% complete<br>• Water Quality Mgt. Program for inventory and inspections.<br>• 66 new sites inventoried – 81 sites inspected.  |
|           | Urban street runoff     | M3 - Evaluate/Enhance Street Sweeping, Catchbasin, and Pipe Cleaning Programs | Review with DPW Operations staff the current street sweeping, catchbasin & pipe maintenance programs, equipment, and schedule; identify program needs.   | Review existing sweeping and CB and pipe cleaning programs, equipment, technology, and complaints with Operations staff; adaptively manage as resources allow.   | By April 2016                   | Review, approval and implementation of updates to the current programs.             | 100% complete<br>• Review completed<br>• Implementation ongoing   |
|           | Hazardous waste control | M4 - Hazardous Waste Control  | Identify sources of mercury pollution and what household products, electronics, appliances, etc... may contain mercury and determine what pollution prevention projects/ programs are feasible to implement. | Mercury pollution source assessment; research sources of mercury and determine what pollution prevention projects/programs the City has resources to implement.  | By April 2016                   | Complete mercury pollution source assessment.                                       | 100% completed<br>• Sources identified<br>• Brochure developed and distributed<br>• Dental Pollution Mgmt. Program  |
|           |                         |   | Use household hazardous waste collection events to reduce the improper disposal of items containing mercury.   | Springfield will continue to participate in the support of events such as the Lane County household hazardous waste events including outreach at public events such as home shows, Spring Cleanup and Earth Day. | Ongoing throughout the cycle    | Participate in public collection events and promote outreach.                       | 100% completed<br>• Annual Spring Cleanup<br>• Regional Drug Take Back event  |
|           | Public Interaction      | M5 – Public Outreach and Education  | Develop and distribute outreach and education materials to the public.   | Staff will continue to develop/distribute educational material and research education options.   | Annually<br>Starting April 2015 | Review, update, and distribute educational materials.                               | 100% complete 2015-2018<br>Ongoing 2019<br>• All edu material reviewed and updated<br>• Distribution at events, classes, LDAP factsheets, participating stores, and at City Hall. |