Clean Water Services Advisory Commission

Meeting Summary and Minutes

November 16, 2011

Attendance

In attendance were Commission Chair Tony Weller and Commission members Molly Brown, Alan DeHarpport, Lori Hennings, John Kuiper, Victoria Lowe, Judy Olsen, Jerry Ward, Sandy Webb, Julie Wilson, Bill Young, Stephanie Shanley, and Clean Water Services Deputy General Manager Diane Taniguchi-Dennis, attending for General Manager Bill Gaffi.

Commission member Deanna Mueller-Crispin was absent.

Others attending from Clean Water Services were Conveyance Systems Department Director Nora Curtis, Government and Public Affairs Manager Mark Jockers, Regulatory Department Director Peter Ruffier, and Public Involvement Coordinator Sheri Wantland.

Summary of Main Agenda Item

S-1. Clean Water Services Stormwater Permit Renewal

Clean Water Services holds an MS4 (Municipal Separate Storm Sewer System) permit for the stormwater program, which is a component of the NPDES (National Pollutant Discharge Elimination System) permit currently under review for renewal. Partner cities and the County are "co-implementers" of the permit. Clean Water Services performs all MS4 functions in some cities and shares those responsibilities in others.

As required by the existing MS4 permit, the current SWMP (Stormwater Management Plan) includes Construction Site Controls, Operations and Maintenance Responsibilities, Structural and Source Control Measures, Illicit Discharge Detection and Elimination (IDDE), Commercial and Industrial Facilities, and Public Education and Outreach. The plan includes a tracking system for each key element and and provides for monitoring water quality. A unique feature of the SWMP is its adaptive management approach, which allows for program adjustments during the term of the permit.

Clean Water Services is one of five large MS4 permit holders which have been working with DEQ (Department of Environmental Quality) to develop consistent permit requirements. The new permits already issued to the other four (Clackamas, Eugene, Gresham, and Portland) include several new requirements which are expected in the Clean Water Services permit. One of the new requirements is reduction of pollutants from municipal facilities or activities, such as parks or street maintenance. Another is expansion of public involvement to include SWMP development and changes. Also required in the new permits is identification of hydrologic impacts (erosion, flow alteration, etc.) related to MS4 discharges, and corresponding mitigation plans. In addition, there is a new requirement for retrofitting in areas which were built without adequate stormwater quality controls.

There are also more stringent requirements for IDDE and adaptive management.

Major points during comments and discussion from Commission members included:

1. concern about agricultural practices which may affect stormwater quality but which are not subject to the same stringent requirements as discharges in the Clean Water Services jurisdiction.

2. redundancy of state 1200C permit and local Clean Water Services requirements for developments

3. difficulty of determining a baseline for "natural" hydrology

4. challenges in tracking effectiveness of public education programs

5. stormwater program success is dependent on participation and behavior of residents

6. smaller, more frequent storm events may be a better basis than 100-year events for stormwater system design

The NPDES permit, including the MS4 component, is expected to be put out for public comment late in 2012.

Minutes

1. Call to Order

Chairman Weller called the meeting to order at 6:32 PM in the conference room at the Clean Water Services Administration Building.

2. Review/Approval of Meeting Minutes from October 26, 2011

Mr. Young moved to approve the October 26 minutes as distributed. Mr. DeHarpport seconded. Motion passed.

Mr. Young clarified a statement near the middle of page 8 describing the Environmental Quality Commission (EQC) as the "predecessor" to the Department of Environmental Quality. The DEQ actually evolved from the state Sanitary Authority in the 1970s as a result of state legislation in response to the federal Clean Water Act .

3. Clean Water Services Stormwater Permit Renewal

Mr. Ruffier provided information about the MS4 (Municipal Separate Storm Sewer System) permit for the stormwater program, which is a component of the NPDES (National Pollutant Discharge Elimination System) permit currently under review for renewal. The NPDES permit renewal, particularly those aspects related to wastewater, was discussed at the October Commission meeting. Mr. Ruffier's presentation (attached) described the evolution of stormwater regulation, how Clean Water Services came to be responsible for managing stormwater, current Clean Water Services

stormwater program elements, new or different requirements expected in the renewed permit and the challenges they may pose, and the process for permit renewal.

> Stormwater was not addressed specifically in the original federal Clean Water Act of 1972, but MS4 discharges were recognized as point sources subject to NPDES permits when the Act was amended in 1987. Regulations were phased in, beginning with large (population more than 100,000) municipalities in 1990. Meanwhile, TMDLs (Total Maximum Daily Loads) were established for the Tualatin River in 1988. The Unified Sewerage Agency (USA, now Clean Water Services) was already responding to these as the regional wastewater management provider. In anticipation of the upcoming stormwater regulations, the three counties and most of the cities within the USA service area requested that it also take responsibility for regional stormwater and surface water management. These "storm and surface water drainage services and facilities" fall under the MS4 permit issued to Clean Water Services as part of its watershed-based NPDES permit. In most other areas of the state and country, each city or other municipality is issued its own MS4 permit, independent of its neighbors and separate from its NPDES permit for wastewater discharges.

Mr. Ruffier explained the differences between stormwater (MS4) discharge permits and wastewater treatment discharge permits.:

1. Stormwater permits are regulated on "process" rather than "performance." It is difficult to apply the same level of control to stormwater that is applied to wastewater, as there are just a few specific sources of wastewater but many and various sources of stormwater.

2. Wastewater permits apply specific numeric limits to certain pollutants, while stormwater permits require pollutants be reduced "to the maximum extent practicable" (MEP). The MEP is not an absolute standard and may vary with the capability and operations of the permit-holder.

3. Each municipality with a stormwater permit produces and follows a Stormwater Management Plan (SWMP) describing the control measures being used to meet the MEP standard. The SWMP must also outline measurable goals and how the control measures will be tracked in pursuit of those goals. The SWMP must include a monitoring plan and an adaptive management program.

4. Compliance with wastewater regulations is documented with monthly discharge reports, while compliance with stormwater regulations is documented in an annual report, which includes results of water quality monitoring.

5. Clean Water Services "regulates" producers of large amounts of industrial wastewater through its pre-treatment program, but large sources of industrial stormwater are regulated under individual 1200-Z permits from the state.

Mr. Ruffier noted that stormwater management ties in with surface water management. Clean Water Services addresses surface water management, wastewater treatment, and water supply/storage in its IWRM (Integrated Water Resource Management) approach and philosophy.

Mr. Ruffier explained that Clean Water Services holds the MS4 permit but its member cities and Washington County are "co-implementers." Clean Water Services performs all MS4 functions in some cities and shares those responsibilities in others. As required by the existing MS4 permit, the current SWMP addresses seven key elements and includes a tracking system for each to assess effectiveness and drive changes to better meet the MEP standard. The SWMP also provides for monitoring water quality and for using an adaptive management approach.

The six key program elements include:

1. Construction Site Controls. Stormwater from construction sites is subject to the requirements of the state 1200C permit. Clean Water Services acts as the state's agent in issuing these permits. Construction site controls require erosion control plans and use of best management practices. Clean Water Services conducts inspections and takes enforcement action when needed. During the last fiscal year there were 13,439 erosion control inspections, resulting in 225 deficiency notices and 40 stop work orders.

2. Operations and Maintenance Responsibilities. Clean Water Services and its partners sweep streets, clean catch basins and water quality manholes, clean and inspect stormwater lines, and maintain constructed facilities. At least 25% of the system must be cleaned annually, and all of the lines must be visually inspected at least once every seven years. Last fiscal year, Clean Water Services and its partners cleaned 400 miles of pipe, inspected 36,700 catch basins, and swept 38,000 miles of street. Leaf collection programs are also provided, some by Clean Water Services and some by cities.

3. Structural and Source Control Measures. The Clean Water Services *Design and Construction Standards* regulates new development and other construction to reduce pollutants, and some existing developments have been retrofitted with measures to address stormwater. The SWMP provides training and tracks areas with pollutant controls, private stormwater management facilities, low impact design projects, and retrofit projects. Last fiscal year, retrofit projects included 124 manholes and catch basins, and six outfalls. Inspections were done on 433 of the 1,339 private water quality facilities within the Clean Water Services District.

4. Illicit Discharge Detection and Elimination (IDDE). Any non-stormwater discharges into the system are prohibited. Clean Water Services actively looks for such discharges and investigates complaints about pollution as part of the SWMP. Clean Water Services tracks the number of cross-connections abated and the number of complaints and investigations resolved. Last fiscal year there were 68 investigations and four cross-connections were found and fixed.

5. Commercial and Industrial Facilities. Clean Water Services administers the state's 1200-Z permits for certain properties which are required to have stormwater discharge permits. This includes identifying facilities subject to the requirements, conducting initial inspections, reviewing spill prevention plans and ongoing reports, and reviewing annual monitoring and compliance analysis reports, as well as providing technical assistance on best management practices. Clean Water Services tracks facilities, plans reviewed, inspections performed, and technical assistance provided. Last fiscal year there were 95 1200-Z permit holders and 100

compliance inspections were performed (some facilities were inspected twice). There were 62 administrative violations (incomplete or late reports, for example) and 67 performance violations recorded as a result of a handful of permit holders with multiple violations.

6. Public Education and Outreach. Personal behavior (pesticide use, car washing, etc.) plays a significant role in stormwater management efforts. Clean Water Services provides education programs for businesses and residents to encourage reporting pollution, riparian care, proper waste disposal, and reducing pesticide use. Media campaigns and outreach activities are tracked. Last fiscal year's campaigns included "Cut the Chemicals" (pesticides and fertilizers), "Do the Doody" (pet waste), and "Can the Wipes" (not flushing disposable wipes). In addition, an "EcoBiz" labeling program for businesses which follow certain best management practices for stormwater quality protection now includes 32 auto shops and four landscaping businesses.

7. Monitoring. Samples must be taken three times per year to evaluate water quality from different land use categories (residential, industrial, etc.) and three times per year to assess ambient water quality. Clean Water Services exceeds this requirement.

A unique feature of the SWMP is its adaptive management approach, which calls for improving results by changing program activities in response to ongoing evaluations.

Construction Site Controls Comments:

Mr. DeHarpport asked when the 1200C permit administration was changed. Ms. Curtis said that Clean Water Services has been the state's agent for 1200C permits since 1994. The 1200C permits applied to construction sites of five or more acres until about five years ago, when they became required for sites of one acre or larger. Clean Water Services erosion control regulations apply to sites of 500 square feet or larger. Clean Water Services is the initial agent for 1200C permits so developers do not have to go through two application processes, but 1200C permit annual renewals come from DEQ (Oregon Department of Environmental Quality). Mr. Weller and Mr. DeHarpport said the renewal cycle is frustrating for developers because DEQ will not close out the 1200C permit for a project until every house is built or until the entire site is stabilized with vegetation. If a developer sells a lot to a builder and ground is broken for just one house, the 1200C permit must remain in effect for the entire site. If there are violations by the builder, the developer is liable as the permit-holder. Mr. DeHarpport pointed out that the 1200C permit was intended to apply to site development activities, not house-building. Once home construction begins, the individual site is subject to Clean Water Services regulations and monitoring, but developers must continue to pay for the 1200C even though there is no oversight from the state. Ms. Curtis said Clean Water Services has discussed this with DEQ because unlike in other jurisdictions, there are local regulations here which cover the state's concerns. Mr. DeHarpport encouraged Clean Water Services to push for resolution of this issue as it creates a rift between the state and the builder/developer community.

Ms. Hennings and Ms. Wilson wondered if there were rules for farming practices similar to the rules for construction site activities. Ms. Wilson mentioned a site with an urban farm where contaminated soil ends up in the stormwater system. Mr. Weller recalled driving through rural Washington County and seeing fields plowed and fertilizer applied right up to the riverbank. He acknowledged that tiling

fields and applying fertilizer are normal, needed farming practices, but each tiled field drains directly into the river and there is no central collection system or opportunity for sediments and pollutants to settle out. Mr. DeHarpport noted that there are financial concerns about placing stringent regulations on ag practices. He and Mr. Weller expressed a general feeling of inequity about the way different industries or communities are regulated. Mr. Weller noted that the state Soil and Water Conservation District (SWCD) had committed to working with the farming community so formal regulations would not be imposed. Ms. Wilson said her understanding is that SWCD involvement must be invited by the landowner. Ms. Olsen said complaints are actually handled by the Oregon Department of Agriculture (ODA), and it is not always a fast process. Ms. Wilson pointed out that any action requires a complaint be filed (rather than a set of rules).

Mr. Ruffier said a recent bill proposed in the state legislature would have moved responsibility for all water quality regulations for agricultural activities, including those within urban areas, to ODA. This would have taken away the control that municipalities such as Clean Water Services currently do have over sediment and erosion off sites inside the urban growth boundary (UGB). Mr. Ruffier said regulation of non point sources outside the urban growth boundary (UGB) is a separate, complex topic. He agreed that there is great inconsistency in the approach being taken to non point sources in terms of protecting the watershed.

Mr. Weller commented on the large number of erosion inspections even without the robust construction activity of past years, and the small number of violations. Ms. Curtis said few deficiencies are identified now that most of the building community is familiar with requirements as a result of education efforts.

Operation and Maintenance comments:

Ms. Brown asked what determines where the leaf collection program is offered. Ms. Curtis said leaf collection—where residents can rake leaves into the street and loaders and trucks are sent to haul them away—is offered in areas with many mature street trees. There are also leaf drop-off programs, where residents can haul their own bagged leaves to a central collection point. Clean Water Services offers two drop-off events each year—one at Aloha High School and one at the Home Depot near Sunset High School. Some cities provide these services differently—for instance, Hillsboro does no leaf drop-off events, but collects leaves throughout the city. Clean Water Services coordinates with partner cities to be sure the programs offered meet the needs of that area. Mr. Jockers reminded that Ms. Curtis had presented information to the Commission last year about an evaluation of the SWMP. One aspect of the evaluation was financing, and how to balance expensive but visible and popular programs such as leaf collection with other elements of the SWMP. Cost was one factor in the decision to do three leaf collections this year instead of four. Mr. Ruffier added that leaves are currently taken to a property where they are later spread on farmland, but the capacity for that is limited and expanding this program would make disposal a problem. At the same time, a higher volume of leaves might create an opportunity for a product that could help finance an expanded program.

Commercial and Industrial Facilities comments:

Mr. Young asked what sort of property might require a 1200-Z permit. Mr. Ruffier clarified that any sort of business which conducts activities which might result in the release of a pollutant beyond the

usual pavement or roof runoff (for example, storage of materials or equipment, or emissions from on-site processes) needs a permit. A shopping mall would not generally require one, but a lumber yard or mill would. Intel is required to have a 1200-Z permit. The Rock Creek WWTF has a permit. Durham does not, because all stormwater there is routed through the wastewater treatment system. Some properties with covered storage areas can be inspected and issued a "no-exposure certification" because the potential pollutant source is not exposed to rain and poses little risk to stormwater.

Mr. Ruffier said the 1200-Z permit process was recently revised to establish new best management practices and a tiered enforcement process. Clean Water Services is evaluating the revisions in terms of its interest and ability to continue administering the program.

Ms. Brown asked what percentage of permit holders had violations. Mr. Ruffier did not feel he could offer an accurate response but would get the information.

Public Education and Outreach comments:

Mr. Ruffier said the EcoBiz program is currently limited to automotive and landscape services businesses but could expand to other types. He noted the idea of EcoBiz designation has really started to take off with landscaping businesses. Ms. Hennings asked if commercial nurseries can apply for EcoBiz designation. Mr. Ruffier said yes, but there has not yet been high interest from that segment of the industry.

Mr. Weller asked if there is any way to track the effectiveness of education programs. Mr. Jockers laughed that he has wondered about that himself, as it is hard to quantify pounds of phosphorus removed per brochure distributed. That is a classic problem with any public education effort. However, Clean Water Services does use surveys to determine if, and how many, people followed up on suggested actions, which is more useful than just reporting how many people were reached. Surveys can also measure awareness of issues before and after education campaigns. At one time Clean Water Services and Metro tried to get pesticide sales data, but stores were not willing to share that information.

Monitoring comments:

Mr. Ruffier clarified for Mr. Weller that samples to measure ambient water quality are taken upriver from those for land use categories.

Mr. Ruffier added that it is difficult to establish definitive cause-and-effect relationships from the monitoring data as stormwater is highly variable, but the water quality trends are included in the annual report.

Ms. Wilson asked if the monitoring component of the SWMP feeds into the Clean Water Services Watershed Health Index . Mr. Ruffier said the monitoring data does feed into the Index, but the Watershed Health Index report is not included in the annual stormwater program report.

Adaptive Management comments:

Mr. Ruffier said Clean Water Services is still working through how best to make decisions about

program adaptations. As just discussed, it is often difficult to define direct connections between activities and results in areas such as public education and monitoring so it can be hard to figure out what is working and what is not. Mr. Ruffier sees adaptive management as a positive and constructive aspect of the SWMP, because it allows for periodic modifications during the term of the permit to ensure that pollutants are reduced to the MEP. This is in contrast to wastewater program requirements which cannot be changed until the permit comes up for renewal or is re-opened for a program modification process.
Mr. Ruffier described four new SWMP elements expected under the MS4 portion of the NPDES permit renewal:

1. Pollution Prevention for Municipal Organizations. Would require reduction of pollutants from municipal facilities or activities, such as parks, street maintenance, firefighter training, waste management sites, and more.

2. Expanded Public Involvement. Would require opportunities for the public to participate in developing, implementing, and modifying the SWMP.

3. Hydromodification Assessment. Would require identification of hydrologic impacts (such as erosion, sedimentation, and flow alteration) related to MS4 discharges, and plans for mitigation of those impacts.

4. Retrofitting. Would require strategy and plan providing adequate stormwater quality controls in areas where earlier development did not include them.

Mr. Ruffier said these elements have already been included in the recent permit renewals for the four other large permit holders in the state (Portland, Gresham, Eugene, and Clackamas), and DEQ's goal is to keep the permits consistent but "customize" them according to the characteristics of the permit holder and the area. All five permittees have been working with DEQ in developing elements of the renewed permits.

Mr. Ruffier noted that public involvement is currently part of the overall permit renewal process and with the new requirement it would specifically be included in any SWMP modifications. Mr. Jockers said the public involvement role would likely be fulfilled by the Commission, plus any other groups with interests related to a particular aspect of the SWMP.

Mr. Ruffier said the hydrologic assessment component will probably be the biggest challenge under the new permit. The new permits are much more explicit about new development maintaining natural hydrologic processes. The objective of this requirement is to "restore and maintain chemical, physical, and biological integrity." Clean Water Services will have to figure out how to incorporate that into the Design and Construction Standards.

Mr. Weller observed that it is difficult to know how far back in time you must go to define "natural" hydrology, so that baseline seems like a moving target. Mr. DeHarpport said establishing a "natural" baseline seems highly speculative. Mr. Weller said streams in undeveloped areas farther up in the watershed can be studied, and some predictions can by made by studying stream geomorphology. Mr. Ruffier said modeling is used. He said there is very good data on impacts of development on urban streams. Clean Water Services is also studying how flow volume and velocity affect sediment

movement in the Fanno Creek basin.

Mr. Ruffier said the new permits for the other four jurisdictions include requirements to "gather information on the impact of existing efforts" and to "conceptually develop proposed actions to address hydromodification where applicable." Ms. Curtis said they do not prescribe a certain standard but are specific that a plan must be in place by the end of the permit cycle. She and Mr. Ruffier hope the new permit for Clean Water Services will also allow for time to draft a plan, but the other permits have been out for nearly a year and DEQ has indicated an expectation that Clean Water Services would be further along than the other four permit holders.

Ms. Curtis said that Clean Water Services does not have a specific "Hydromodification Plan" but does have some related standards, although they don't yet have data on the impact of the current standards.

Mr. Ruffier said the retrofitting component of the permit also will require a plan. The other new permits call for permit holders to "develop a stormwater retrofit strategy, including objectives and rationale; summarize current efforts and costs; evaluate new stormwater control measures; identify high priority areas for stormwater controls; and provide estimated time line and cost." Ms. Curtis said Clean Water Services currently has a retrofit program but it is set up as an opportunistic program—retrofits are done if crews are working on another project in the area, for instance—and areas haven't been prioritized. The new permit requirements will expand the existing program.

Ms. Lowe observed that DEQ may expect more of Clean Water Services since they are not "starting from scratch."

Mr. Ruffier expects the most challenging aspects of the new permit will be meeting the requirements for hydromodification assessment and retrofitting. Another challenge will be the more stringent requirements for IDDE, including a formal plan and an obligation to perform a specific number of evaluations and investigations. The adaptive management portion of the SWMP will also receive additional scrutiny under the new permit.

Mr. Ruffier reminded the group that the MS4, or stormwater, permit is part of the Clean Water Services NPDES watershed-based permit renewal. The four permits issued last year to the other large jurisdictions were for MS4 only. Everything discussed tonight will be part of the NPDES public comment process and Clean Water Services staff will continue to seek input and guidance from the Commission. Mr. Ruffier said at this time it appears the NPDES permit will be put out for public comment late in 2012.

Ms. Brown asked how often this process happens. Mr. Ruffier said permits are issued for a five-year term but usually are extended to 8-10 years. This is the third MS4 permit renewal since stormwater regulations began in 1990.

Mr. Jockers said he was especially interested in having the Commission review the MS4 components of the permit because stormwater is such a visible element. Sanitary sewer operations have an impact on ratepayers but stormwater has a broader impact on stakeholders and attracts more interest as some things can be difficult to implement or controversial. He noted that when DEQ held its public hearing on the watershed-based permit in 2004, there were 36 comments and 33 of them were related

to stormwater. Stormwater is also the portion of the permit most recently addressed in litigation.

Ms. Brown observed that stormwater also has broad impact in that it requires help from the public to succeed (unlike the sanitary sewer program, where residents simply flush and forget!). Mr. Jockers recalled Mr. Gaffi's comparison that holding Clean Water Services responsible for what comes out of the outfalls in the basin is like holding the fire department responsible for a fire in your home. Agencies can educate and provide resources but ultimately so much of it comes down to individual behavior. Ms. Wilson pointed out that the action or inaction of even one business or individual can have broad impact in the stormwater program because the permit holder is responsible for the result and its ratepayers end up footing the bill for fixing any problems.

Mr. DeHarpport said if the goal is to have an impact on water quality the focus should be on getting the most bang for the buck and not just slicing and dicing what already exists. Increasing detention and increasing the size of water quality facilities when the existing services and structures appear to be functioning quite well seems like splitting hairs when at the same time agriculture is tilling right up along the side (of streams), applying fertilizer, and so on.

Ms. Olsen said that has been the focus of the programs they have been working on. There are still people who farm right up to the edge but the goal is to have them not do that anymore but instead develop riparian areas and filter strips.

Mr. Jockers said that was certainly the idea behind the Enhanced CREP effort launched several years ago as part of a trading program under the sanitary sewer permit, which allowed for shading streams throughout the basin instead of installing chillers at treatment plant outfalls to meet the water quality temperature requirement. It brings the question and the challenge of how might we explore trading under the stormwater program.

Mr. Weller said stormwater facility design is usually approached from a flood control standpoint, basing storage requirements on 100-year events. Even though all his training was about the largest event that might occur once every 100 years, after years in the engineering field he has come to the idea that the smaller, more frequent events are more important in terms of stream quality. He would rather see a focus on being more effective in dealing with the events that happen more often and not trying to apply the same protection standards to some of the larger events. Large events are infrequent and cause less cumulative damage, especially if restoration work has put into place the natural vegetation that could better resist that damage.

Ms. Curtis said some interesting data related to Mr. Weller's idea is emerging from a USDA (United States Department of Agriculture) study of streams in the Tualatin basin. Some streams are so fragile they erode "with a sneeze," while others are incredibly stable at very high flows. The soils in this area are quite variable—wind-blown silt to clay to rocks—and they all react differently in different circumstances.

Mr. Ruffier concluded that as tonight's discussion shows, the renewed permit will bring a number of issues, and some will be controversial. Responding to the new stormwater requirements will put pressure on program rates and revenues, and the Clean Water Services response will be compared to the responses of the other four large permit holders. For instance, there is some perception by regulators that Clean Water Services could be more aggressive with LIDA efforts, in light of what

others are doing.

Ms. Webb mentioned two large developments along Baseline which might add about 3,000 people and wondered if such large projects were being looked at to make up for the failings of those which were built in the past. Ms. Curtis said that is always the challenge in revising design and construction standards—do you put the burden on the relatively small area that's left or do you try to gain ground on existing uses that came in before the rules came into play? Development is an easy target because it's very visible but in reality the development that is happening—even at the height of things—is really very small compared to the total area in the basin.

Mr. DeHarpport noted that in early developments, wetlands were filled in and streams were piped out. He said restoring those creek banks would have a bigger impact than increasing detention capacity. Ms. Hennings pointed out that stormwater impacts go beyond the stream bank and riparian area. Mr. Weller said that in terms of stormwater management, developments today look very different than those even just five years ago as LIDA has become the preferred approach.

4. Announcements

Mr. Jockers said the Commission will not meet in December.

He also said the Clean Water Services management team is developing a work plan for the Commission, listing agenda items for the rest of this fiscal year. Coming up during the first quarter of 2012 are presentations on the FOG (fats, oils, and grease) program and surface water management program funding. Annual elections for Chair and Vice Chair will be held and Budget Committee members will be appointed. The Board of Directors has also asked staff to review the Commission bylaws, which govern the group's activities, role, and operation. The last major revision was in 1991.

Mr. Jockers presented a heron photo plaque to Ms. Wilson in recognition of her service as a Commission member, as her term expires with this meeting. Commission members also acknowledged Ms. Wilson with thanks and applause.

5. Adjournment

Mr. Weller declared the meeting adjourned at 8:00 PM.

(Meeting notes prepared by Sue Baumgartner)