### Seattle Board of Park Commissioners Meeting Minutes August 10, 2017

Web site: <u>http://www.seattle.gov/parks/parkboard/</u> (Includes agendas and minutes from 2001-present)

Also, view Seattle Channel tapes of meetings, June 12, 2008-most current, at <a href="http://www.seattlechannel.org/videos/watchVideos.asp?program=Parks">http://www.seattlechannel.org/videos/watchVideos.asp?program=Parks</a>

#### **Board of Park Commissioners**

Present: Andréa Akita Tom Byers, Chair Dennis Cook Marlon Herrera Evan Hundley Kelly McCaffrey Barbara Wright

Excused: William Lowe, Vice Chair

#### Seattle Parks and Recreation Staff

Jesús Aguirre, Superintendent Rachel Acosta, Park Board Coordinator

The meeting is held at 100 Dexter Avenue North. Commissioner Byers calls the meeting to order at 6:30pm. Commissioner Byers calls for approval of the August 10 agenda; Commissioner Hundley moves, Commissioner Cook seconds and the agenda is approved unanimously.

#### Oral Requests and Communication from the Audience

Tim – Lake City Neighborhood Alliance Parks Committee will be attending the Park Board on September 14. He asks for the Board to support their funding solution for community centers. Magnuson needs expansion as well as the others identified in the Park District Plan. The City Council will work on the budget in November.

Linda Finney – Colman Park Vista Restoration Project – She distributes pictures of Mount St. Claire to show what they look before and after pruning and how much the view corridor improved.

Daria Elgin – Colman Park Vista Restoration Project – He was encouraged at the last meeting with the Board. He felt the Board would hold SPR staff accountable and they

would achieve more tangible accomplishments. There has been no real progress at Colman Park. Other parks have been cleared of trees; these other groups went straight to the Mayor instead of coming to SPR. Help us by doing more.

Susie Burke – Sunset Hill community for view restoration in first week of August – view needs to be restored. Weddings were canceled because the view was obscured by the brush. She asks for guidance – the brush used to be cut every few years before and needs to be done again.

Gary Gaffner – Gary informs the Board that Donna Kostka, former Board of Park Commissioner passed away in the last month. She was a wonderful Park Board Commissioner and friend to the department and she will be missed.

### Superintendent's Report

Colman Park Vista – SPR staff have been working with the group to create a plan that everyone can agree on. SPR is committed to getting there. Next meeting will include members of Seattle Department of Construction and Inspection – to provide input on Environmentally Critical Areas at Colman Park Vista.

The Board would like to see the maintenance schedule for Colman Park.

There is a need to balance restoration with views with environmentally critical areas.

The Superintendent will continue to provide regular updates to the Board regarding the Colman Park project.

The City Council Parks Committee voted to move the moorage lease to full council next week. The rates do not change until improvements are complete and there will be a cap on rates for moorages 30ft or smaller. SPR will have to approve the rate after lessee performs a market study.

Georgetown Spray Park – The spray park at Georgetown was closed because there were challenges in providing hot water. SPR staff stepped up and brought in a temporary bathroom trailer to keep the spray park open.

Volunteer program statistics – 14,000 adults and 6300 youth volunteered in facilities; \$3.2 million worth of work in the community. SPR appreciates its' volunteers!

2017 Parks and Open Space Plan was approved at the August 3 City Council meeting. This plan will drive the departments open space conversations.

Landmark Board approved the Seattle Asian Art Museum proposal. There are two parts to the legislation package that will go to City Council; 1) development agreement 2) the

operating agreement. Commissioners would like more information about the public benefits, especially regarding access to the museum, restrooms and meeting rooms.

City Council gave approval to repair the Emma Schmitz seawall. SPR is entering a partnership with the United States Army Corps of Engineers for them to complete the work.

Superintendent Aguirre thanks staff for all their work during the Seafair events! The did a great job.

Superintendent Aguirre shares a letter he received from a parent who participated in a program. Her child participated in the Specialized Recreation summer camp program for 8 weeks. The staff provided support but allowed them to be independent. He had a wonderful time at camp!

Magnuson Park – The company that held outdoor movies at Magnuson Park were canceled because they didn't feel it was a safe space. There are many people there in the evenings. SPR wants to keep activation there. The City Council will add additional funding for increased security. The Community Center is looking to have more structured programs there in the evenings, which Associated Recreation Council will help fund. SPR is working with partners for activities.

Draft feasibility plan – to look at what kind of expansion could happen at the Magnuson Community Center

Lake Union Park – construction has started.

# **Briefing and Discussion: Healthy Environment Action Agenda**

Presented by Todd Burley, Seattle Parks and Recreation

Healthy Environment is our middle name.

SPR wants to be a leader in environmental and sustainability issues; they are working on identifying what they are doing and what more they can do and tell people about it.

SPR manages 11% of city land, therefore, they can move the needle on environmental and sustainability practices.

Tangible benefits on environment in Seattle

Increase biodiversity through stewardship and best practices

Internal goals – SPR staff will be the ones to move this initiative forward; tell their story about the good work already occurring. Todd is working with staff on how to measure progress and report on it.

HEAT! A diverse team of passionate employees. They are charged with moving the agenda forward. Provide advice and perspective.

Healthy environment summit to look at what SPR is doing and what more can be done.

Healthy environment inventory – already doing: 65+ actions

- Landscape management plans
- Irrigation management
- Environmental education
- Youth Green Corps
- Integrated pest management
- Green Seattle Partnership
- Design/construction standards
- Urban forest restoration

Healthy environment performance dashboard – this is a draft but the general idea is a dashboard. Breaks down silos and divisions a little bit into work areas. Each area has rating systems where there are specific actions that can be measured. The dashboard is color coded to make it easy to understand.

Healthy Environment Indicators – these are the areas in which SPR would like to have an impact.

Parks Legacy Plan values are there as a reminder of what SPR is working towards and why. Race and Social Justice important lens through which all these metrics are considered.

He asks the Park Board:

What SPR does that they want other people to know?

And

Initial actions SPR can take in the next 5 months to show leadership on the HEAA?

Commissioner Akita says SPR is a large department with 11% city land. This feels like a great resource for other departments. Todd responds that SPR is already working in partnership with Seattle Public Utilities, Seattle City Light and Office of the Environment. He has been reviewing other measures throughout the city and other municipalities and national certifications metrics to make sure SPR HEAA is at the forefront.

Commissioner Wright feels SPR should highlight SPR staff – She is so impressed with the work SPR staff have been doing with volunteers at the Portage Bay Natural Area; there's an educational component that gives people an opportunity to learn about why the environment is so important. With the new plantings and trails, there is increased biodiversity. Since February she has seen 67 species of birds. She credits the community partnerships with SPR for the installation of nesting platforms and duck boxes.

Commissioner Hundley thinks posting 30-second video clips from volunteers doing good stuff.

Commissioner McCaffrey mentions all the forest stewardship by GSP should be widely publicized. She sees their handiwork everywhere. Todd mentions they are trying to figure out how to report this out to the community.

She also suggests installing more shade trees at parks where there are none.

Schools – STEM programs to partner with them to work on projects in parks and collect data.

Commissioner Cook thinks it is great they are using an RSJI lens when doing this work and he appreciates the tools to measure progress.

Commissioner Herrera – the planet has too much carbon. 1% for the arts funds – use art to tell the story of all the work the department is doing.

LEED standards – Institute for Sustainable Infrastructure has a holistic way to measure how projects are done – equity, economy, ecology; he suggests using their lens of environmental justice and equity and apply it. Todd is learning about environmental equity and sustainability – use great work that is being done; diving into Race and Social Justice toolkit for specific items.

Commissioner Wright sees the language does not reflect the outcomes. The language does not catch the – on the ground work – happening. There is an outcome called "Revegetation" – she suggests "tree planting" – look at language to ensure it is clear.

How to measure the movement of people/animals; green spaces and other open spaces that are not owned by SPR but other departments/private land. Opportunities to ensure greenspace/open space are included in future development. Is there a way to leverage private development?

A different category – volunteerism and those hours have value.

Safety – this seems like a potential category for sustainability.

Where do partnerships fall into the matrix? New York has expectations of their contractors/lessees. Todd is considering how that aligns with this plan.

The Commissioners appreciate the graphic design work on the Dashboard.

Todd asks the commissioners to consider for future conversations as this moves forward:

Priority areas of innovation? Should SPR create a tier system? Area to focus? Wildlife? Water?

Who should our audience be?

Who should be our partners?

How does the department balance park use needs with environmental goals?

He asks the Board to consider these. The Commissioners thank Todd for all his work and support his efforts.

# Update: Electric Vehicle Charging Stations

Presented by Joelle Hammerstad, Seattle Parks and Recreation; and Seema Ghosh, Seattle City Light

# Written Briefing

# MEMORANDUM

Date: August 10, 2017
To: Board of Park Commissioners
From: Joelle Hammerstad, Sustainability & Environmental Performance Manager
Subject: Partnership with Seattle City Light to pilot Electric Vehicle charging stations

### **Requested Board Action**

Seattle Parks and Recreation (SPR) would like to enter into a partnership with Seattle City Light (SCL) to install several electric vehicle (EV) charging stations in SPR parking lots throughout the City. The Board first heard about this project in May. This is a follow-up presentation.

Staff is seeking input on whether the department should enter into an agreement with SCL to install EV charging stations for a pilot period to last up to three years. If the Superintendent approves the pilot project, staff will begin working on a Memorandum of Agreement (MOA) with SCL.

### Policy Description and Background

"Since [the last report in 2014], stronger evidence has emerged for continuing, rapid, human-caused warming of the global atmosphere and ocean."

#### U.S. Global Change Research Program Climate Science Special Report June 2017

"[S]low progress in reducing future emissions is increasing the likelihood that communities will face significant climate change impacts."

Preparing for Climate Change City of Seattle, August 2017

"[*E*]very gallon of gasoline or diesel which is replaced by electricity is a 100% reduction in carbon pollution."

2017 Drive Clean Seattle Implementation Strategy June 2017

In Seattle, about 65 percent of fossil fuel emissions are from vehicles. Yet Seattle residents have access to locally sourced, renewable energy from Seattle City Light.

Seattle City Light was the first electric utility in the nation to become greenhouse gas neutral in 2005. About 90 percent of its power is generated from hydroelectric dams on the Skagit and Pend Oreille rivers.

In autumn 2016, Mayor Ed Murray and City Council confirmed their commitment to transportation electrification by passing the Drive Clean Seattle Initiative.

The initiative supports developing policies that accommodate charging infrastructure for people of all walks of life, living in a diversity of housing types, charging their vehicles at home or on public lands, and using a shared or owned vehicle.

#### Issues for Discussion

Recommended criteria for an agreement with SCL are below.

### Pilot period

• Two to three years, including an evaluation period.

### Siting philosophies

- Make every effort to keep the footprint compact.
- Avoid removing any vegetation.
- Avoid locations that may interfere with bus layovers, along walking routes and access points for park maintenance vehicles.

### Siting criteria

- Golf courses
- Large, regional parks
- Ballfields
- Parks with more than 100 parking spaces
- Well-lit locations
- Protected distance from trees
- ADA accessible

# Public notice

- Installation of each new EV charging station shall require a public notice and a 14-day comment period.
- Notices should be posted on site in the immediate vicinity of the proposed EV charging station.
- SCL and/or its designee shall provide a summary of the outreach process.

### Design

- SCL will collaborate with SPR on criteria for selecting a design/build/operate firm.
- SCL and/or its designee will adhere to SPR's design review process, including reviews at 30%, 60% and 90% design drawings.
- Siting review will include considerations for proposed locations in Historic Districts.
- SCL and SPR will jointly determine the cost of SPR staff reviews, and include an SCL funding mechanism in the agreement to pay for SPR staff to review designs and coordinate construction.

### Construction

- Seattle City Light shall pay for all construction costs.
- All construction will go through normal City of Seattle review processes.

### **Operation and Maintenance**

- EV charging stations will be wholly owned and operated by Seattle City Light and/or its designee.
- EV charging infrastructure will be at least AC Level 2 or DC fast-charging stations to encourage quick charging and parking turnover.
- Fast-charging stations will allow up to 60 minutes in the parking stall.
- Level 2 stations will allow up to 4 hours in the parking stall.
- SCL and/or its designee will be responsive to maintain and repair the infrastructure both at the network level and at individual EV charging stations, including:
  - Responding to system-wide outages within one hour.
  - Responding to an individual malfunctioning unit within one business day.
  - Reported graffiti should be abated within six business days, per the Graffiti Nuisance Ordinance 118082.
- All infrastructure shall have a label on the unit that identifies the contact information for repair and maintenance services.

# Enforcement

- Non-electric vehicles will be prohibited from parking in EV charging spaces.
- EVs shall be prohibited from parking in the spot, unless they are actively charging.
- Signs indicating "electric vehicle parking charging only" will be placed on site.
- Penalties for violating will be in line with SMC 11.72.125, which prohibits use of the space for anything but EV charging.

### Equity

• SPR will partner with Office of Sustainability & the Environment to understand racial equity benefits to and burdens on communities of color, immigrants, refugees and people with low incomes or limited English-speaking proficiency.

# Evaluation

- SCL and/or its designee will collaborate with SPR to evaluate the pilot.
- Evaluation criteria will include:
  - Customer satisfaction survey, using contact information from the charging stations.
  - Collected data from chargers, including:
    - kWh used
    - frequency of use
    - length of charge
    - time of day use
    - revenue generated
    - carbon emissions avoided

#### Next steps

- If the pilot <u>is not</u> successful as determined by the evaluation, SCL will remove the charging stations and restore the site to its former condition.
- If the pilot <u>is</u> successful, SPR will determine if it is in keeping with our values to pursue a concession-type agreement with the owner of the charging infrastructure.

### Budget

Working with SCL, SPR will determine SPR staff time required to review designs and coordinate with the design/build/operate firm. SCL will provide funding for SPR's Planning and Development Division staff to review designs at 30%, 60% and 90%, as well as to coordinate with the vendor on construction.

SCL and SPR will use an interdepartmental work order to achieve the transfer of funds.

### <u>Schedule</u>

SPR and SCL would like to begin coordinating the installation of EV charging stations this fall, with the goal of having the stations installed by summer 2018.

### Additional Information

Joelle Hammerstad Sustainability & Environmental Performance Manager Joelle.hammerstad@seattle.gov 206.733.9704

# Presentation

Joelle is the Sustainability and Environmental Performance Manager for Seattle Parks and Recreation and she introduces Seema Ghosh, a Power Systems Engineer from Seattle City Light.

Joelle reviews some of the background she presented at the July 13 Board of Park Commissioners meeting.

There is no cost to Seattle Parks and Recreation to participate in this pilot project.

This project is part of the Drive Clean Seattle Initiative in which Seattle City Light (SCL) is installing charging stations at different locations throughout Seattle.

There are 2 types of chargers being proposed.

Site philosophy – SCL is putting in 20 sites throughout the city; Seattle Department of Transportation is putting Electric Vehicle charging stations on the street in urban villages.

SCL will pay for SPR staff time for design review at 30, 60 and 90% design completion.

All the chargers will have contact information on them if there are maintenance needs.

The Commissioners question whether people will just park their cars in the spot and ask what enforcement measures there will be.

Joelle mentions there is an equity component because this will provide access to those who may not have homes with access to infrastructure.

The Commissioners ask how they will measure whether the program was successful. She says they will use customer surveys and gather data from the chargers themselves.

Pilot will last 2-3 years.

After the pilot? SPR will decide if they want to continue operating; they may renegotiate with vendors;

Or

SCL will remove the charging if SPR decides that they don't want it or see the benefits.

Joelle mentions how this program aligns with SPR's goal of "Healthy Environment" and driving electric keeps dollars local instead of sending them to multi-national oil companies.

Potential locations:

Interbay Golf Course

- Strengths:
  - Ample parking
  - Sited near a major road
  - Utility infrastructure nearby
  - Well-lit
- Weaknesses:
  - No existing EV parking

Jefferson Golf Course

- Strengths:
  - Existing EV parking spaces
  - Utility infrastructure nearby
  - Well-lit
  - Ample parking
- Weaknesses:
  - Away from the road

# Magnuson Park

- Strengths:
  - More than 100 parking spaces
  - Requested by the community
  - Well-lit
  - Visible location
- Weaknesses:
  - Historic District
  - Not near the main road

Ravenna Eckstein Community Center

- Strengths:
  - Community request
  - Community center slated for solar
- Weaknesses:
  - Extremely limited parking
  - Not visible from a major road

# Lincoln Park

- Strengths:
  - More than 100 parking spaces
  - Visible from a major road
  - Well-lit
- Weaknesses:
  - Utility infrastructure unknown
- Mt. Baker Rowing and Sailing
  - Strengths:
    - More than 100 parking spaces
    - Well-lit
    - Visible from a major road
  - Weaknesses:
    - Utility infrastructure unknown

Green Lake Park

- Strengths:
  - More than 100 parking spaces
  - Visible from a major road
  - Well-lit
- Weaknesses:
  - Utility infrastructure unknown

# Carkeek Park

- Strengths:
  - More than 100 parking spaces
  - Well-lit
- Weaknesses:
  - Not visible from a major road
  - Not near a major road
  - Utility infrastructure unknown

SPR is partnering with Fourth, the Puget Sound Clean Air Agency and the Office of Sustainability and Environment for a National Drive Electric Week – They are having an event at Denny Park on September 9. She encourages the public and the Commissioners to attend and test drive an electric vehicle!

Ghost balloon – This will be an art installation used to inspire people to switch to electric vehicles. They attach a hose to a balloon to show the carbon emissions. It's illustrative.

Commissioner Cook asks SPR staff to consider scheduling when construction occurs and to talk with athletic folks to ensure it's not too disruptive.

The Commissioners wonder if it takes 3-4 hours to charge – who will leave a car that long? Can one do a partial charge? Joelle responds that SCL wants to put in DC fast charge which takes 20-30 minutes to charge.

Is vandalism an issue? Can people just pull the plug? Most electric vehicles have a lock so they can't pull it out.

Charge how much? They are working on the fees for the charging system. It will be a rate/session, perhaps pay by credit card or a phone application. It costs approximately \$5.00 for a charge.

The Commissioners appreciate that one criteria is a large parking lot.

Commissioner McCaffrey wonders whether SPR staff time could be better spent investing in other aspects of transportation infrastructure, like connecting Metro bus routes with parks and community centers or installing bike racks. The Commissioners ask where the funding is coming from? SCL is rate-payer funded – capital budget but they will recover costs with the fees.

SPR is working to push active commuting and improving infrastructure for bicyclists and pedestrians.

Construction impacts? What is timeline for construction? Utility will provide power and service drop and then vendor comes in. It does require coordination with goings on at the park.

City of Seattle has the largest public fleets of electric vehicles.

The Commissioners wonder the percentage of Seattle residents who drive electric vehicles. Joelle does not have that number but a large part of this pilot is to reduce the barriers to purchasing electric vehicles.

This pilot is for 2 electric vehicle charging stations, but SPR would like to do more, if possible.

Vendors didn't talk about vandalism as much as maintenance from dropped hoses.

The commissioners suggest offering ideas of what to do in parks while cars are charging.

Public benefit? Commissioner Wright says the right of way would be a more appropriate location for charging stations. She questions, why parks? She can't use a fast charge for her car and to charge for 3-4 hours – she feels not many people could benefit and visually it doesn't feel good in a park. She agrees with Commissioner McCaffrey that there is more payback with other opportunities.

Currently, these spaces subsidize the internal combustion engine. This would eliminate barriers for renters and folks that don't have access to charging stations and that is the public benefit.

Joelle adds, there will be a metric that SPR will use that will determine if the program is successful and if it is, SPR could put in more.

Criteria to look at – activation – drawing people to a place with a charging station. How will it be evaluated? Besides the data from the chargers and the survey, what happens if the pilot is successful?

How many people can benefit if a park is open from 6am to10pm? As SPR moves the agenda forward, Jesús is supportive of the EV charging stations. He understands all the points made from the Commissioners. Could Board thoughts be incorporated and then provide recommendation? Maybe a vote once there are details nailed down.

Seema mentions SCL is doing several installations this year and then 2018 would include the 2 Parks sites.

The Board has given great input.

Jesús will incorporate the Board's ideas into his decisions. Commissioner Byers appreciates and enourages SCL and SPR to maintain their partnership.

**Briefing: Water - Conservation and Management in Seattle's parks** 

Presented by Joelle Hammerstad and Karen Galt, Seattle Parks and Recreation

# Written Briefing



# MEMORANDUM

Date: August 10, 2017

To: Board of Park Commissioners

From: Joelle Hammerstad, Sustainability & Environmental Performance Manager

Subject: 2017 Update on Water Use

### **Requested Board Action**

Seattle Parks and Recreation (SPR) is one of the largest consumers of potable water in the City of Seattle. Our peak season water use is May through September. This is an informational briefing about SPR's water use so far this year, conservation efforts and water use in the larger context of our Environmental Agenda. No decision is requested.

### **Background**

Seattle Parks and Recreation has been an active partner with Seattle Public Utilities in conserving water for many decades; however, in the past 10 years, we have focused the majority of our conservation efforts on irrigation.

SPR uses approximately 224 million gallons of water each year. About 75 percent of that is used for irrigation. Of the 6,400 acres SPR manages, less than 10 percent – about 600 acres – is

irrigated. In general, we irrigate from mid-May to mid-September; although, that varies from year to year, depending on the weather.

While the City's population continues to increase, our water consumption has basically stayed the same. In 2010, our per capita water use was 368 gallons. In 2017, that number is 320 gallons.

#### 2017 Seasonal Water Use

As August 8, Seattle has not had rain in 52 days – a record-setting dry spell. For an organization that uses most of our water during the summer months, this is an important development.

Our SPU billing cycle comes in two-month increments, and we have not received our July/August billing data; however, as of the end of June, our water costs were slightly below the three-year average – despite a water/sewer rates increase by 49 percent since 2009.

Our total water/sewer billing through the end of June was \$863,000. The average of our water/sewer bills during the same period over the previous three years was \$901,000. (See graphic below.) Because of our early savings, we believe that in spite of a long dry spell, our costs will be at normal levels through the end of the year.

# Total Department Water and Sewer Costs

Bill Month	(Multiple <b>∓</b> ems)	Bill Month +	1						Wate	r and Sew	er
Row Labels 💌 Total Cost		Total Cost	Total Water and Sewer Costs					;	Rates have increased		
2009	\$568,596			January - June Bills					by 49% since 2009		
2010	\$553,287										
2011	\$477,996	\$1,200,000								\$1,082,790	
2012	\$575,766	\$1,000,000							\$914,395	-	\$863,20
2013	\$702,395						\$702 395	\$703,806			3803,20
2014	\$703,806	\$800,000	\$568,596	\$553,287		\$575,766		\$705,000			
2015	\$914,395	\$600,000			\$477,996						
2016	\$1,082,790	\$400,000									
2017	\$863,205	\$200,000									
2017											
2017		\$0									
2017		\$0	2009	2010	2011	2012	2013	2014	2015	2016	2017
		\$0 - Year 🔻	2009	2010	2011	2012	2013	2014	2015	2016	2017

# Water bills through June



Because we track our water use based on data provided by SPU, and we don't get our water bills for July and August until after the peak season, we rely heavily on historical data to guide us through the hottest, driest months.

We have more than a decade of detailed water use data. We can analyze the data by park, year and consumption amount. Water Manager Karen Galt uses the data to create a visual picture of water use, which she then analyzes, flagging the sites where water is higher than expected. She shares this data with crew chiefs, gardeners and other in-the-field personnel. They strategize what may be causing high water use and problem solve together.

In addition, we use computerized smart sprinklers and irrigation controllers. Instead of relying on old-fashioned timers, our irrigation system uses cell phone technology to draw data from sensors and weather forecasts. Our computerized irrigation system measures how much water is needed for any given landscape and turns water on and off at precise times.

Proper operation of irrigation systems is an important foundation of our water management practices. Just this year, we developed a new online training for staff in the field on Irrigation Best Management Practices (BMPs). This online training marks the first time we have employed standardized training on irrigation BMPs.

With the seasonal nature of temporary staff who work in the field, and the resulting high turnover in this group of employees, it is important to have a consistent message on irrigation management. The on-demand nature of the online content means that the training reaches all staff in a uniform way.

#### **Environmental Sustainability**

Our department strives to be at the front of sustainability practices. Harnessing resources that are infinitely available, naturally occurring, constant and free is a cornerstone of what we do.

These are just some of the innovations we employ.

- *Rain catchment for irrigation.* We installed our first underground rainwater catchment system under the lawn at the Northgate Community Center and Library, which opened in 2007. Rainwater captured in the Olympic-swimming-pool-sized cistern holds 2.5 million gallons of rainwater. It is held until summer, and used for irrigation.
- Drip irrigation for grass. This spring we installed and began testing a sub-surface drip irrigation system for grass at Kubota Garden. The highly efficient system uses buried tubes that slowly emit moisture over time, which saves water by eliminating surface water evaporation.
- Water Shortage Contingency Plan. Seattle Parks and Recreation has a very mature, wellthought and thoroughly tested Water Shortage Contingency Plan (WSCP). We developed the plan in 1999, and updated it in 2010. In the summer of 2012, we implemented the plan so that we could test its strengths and weaknesses. Based on the information we learned then, we were ready to jump into action in 2015, when SPU implemented water restrictions because of drought.

#### Additional Information

Just this month, the Office of Sustainability & the Environment released its latest <u>Preparing for</u> <u>Climate Change</u> report. The report clearly states that "all scenarios show warming" of the Seattle area.

Analysis by Seattle City Light found that the Seattle metropolitan area is likely to see 18 additional days (+/- 6 days) of temperatures above 86 degrees Fahrenheit by the 2050s.

The report goes on to state that:

Warmer winter temperatures are expected to lead to lower winter snowpack and higher (and earlier) peak streamflows...[t]hese changes simultaneously increase the risk of flooding and drought, and will require more active management of water resources to meet objectives for people and the environment.

SPR has always been a leader on sustainability, and will need to become even more innovative and creative around water use as we face the challenges of climate change in the 21<sup>st</sup> Century.

# Presentation

Joelle introduces Karen Galt, the Water Management Coordinator for Seattle Parks and Recreation.

97% salt water on the planet, 2% glacial ice, and only 1% is fresh water that people use.

The City of Seattle receives its water from 2 watersheds – Cedar River Watershed provides 65% of our drinking water and the Tolt River Watershed – 35%.

Karen has been collecting data for 10 years to inform her and to do the best job on irrigating.

<sup>3</sup>⁄<sub>4</sub> of SPR water usage goes to irrigation, which equals 600 irrigated acres and approximately 168 million gallons/year from May- September.

As the population increases, the water consumption has stayed flat.

Conservation equals careful managing the resource instead of cutting back.

Water rates go up even though the usage does not.

Irrigation demand is based off historical water usage and weather; considering evapotranspiration (a certain percentage of water evaporates as it is being watered); rain and estimated turf watering needs.

Smart Irrigation system – manages <sup>3</sup>/<sub>4</sub> of SPR water use – SPR is incrementally increasing the number of sites that use it.

The Smart Irrigation System talks to the Weather System and the gardener controls the irrigation system. When there's a problem the system will send an alert, which allows staff to more quickly deal with maintenance issues.

Drip irrigation at Kubota – It's a new pilot, using drip irrigation under the turf. It could save a lot of water but it is hard to find out when something isn't working until grass dies. SPR will monitor how it works over the next couple of years.

Storm water runoff – North Seattle Community Center has a giant underground cistern that takes runoff from the roof. It provided water to the lawn up until about 3 weeks ago.

# What now?

The Office of Sustainability and Environment put out a report entitled "Preparing for Climate Change" and it shows that Seattle will warm and we're using this information to inform how we manage our water moving forward.

Take aways:

Wettest winter in 122 years.

City of Seattle is preparing for climate change because it will affect how we operate as a department.

A Practical role of parks to consider is carbon sequestration and heat island affects - hard surfaces take in heat but parks alleviate that affect.

Additional 18 days of hot weather by the 2050s, which is equal to +/- 6 days. It will be even more important the city has green spaces to provide that respite in the city from the heat.

The Commissioners are impressed with Joelle and her team for their proactive, hard work and the smart water choices the department is making.

Typical irrigation runs between 11pm and 5am. Sometimes, the time window must be larger because the parks are bigger.

The Commissioners are interested in if there are other parks with water saving infrastructure and Joelle lists the following:

- Hubbard Homestead has a small cistern
- Carkeek has catches that returns to toilets
- Rainier Beach has a cistern to capture roof runoff and it goes into the toilets.

How promising is the cisterns? There are costs. When the water is underground, it must be pumped up. There is a learning curve and SPR is continuing to figure out the best practices.

The Commissioners suggest as community centers are redeveloped, SPR should SPU on ensuring the facilities are water wise.

## Old/New Business

Commissioner Byers asks for review of how people felt about this agenda around a central theme and the commissioners agree it was useful.

# There being no other business, the meeting adjourns at 8:40pm.

APPROVED: \_

DATE

Tom Byers, Chair Board of Park Commissioners