



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**

Board of Directors

Governance Committee

Wednesday, December 13, 2017

9:00 a.m.

- 1. Call to Order Ellen Boardman, Chairperson**
- 2. *FY 17 DC WaterWorks! Program Update*.....Korey Gray, Compliance Officer**
- 3. *Blue Drop Appointment*..... Alan Heymann, Chief Marketing Officer**
- 4. *IP Monetization Update* Biju George, Chief Operating Officer**
- 5. Executive Session ***
- 6. Adjournment**

*The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager



FY 17 PROGRAM UPDATE

Presented to the

Governance Committee

Ellen Boardman, Chairperson

Wednesday, December 13, 2017



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

DC WaterWorks Program

As part of the Board's Strategic Initiative #2, the DC WaterWorks encourages and supports the development and employment of local residents as employees on DC Water construction and service projects.

Program Goals

- Fifty-One percent (51%) of the total contractor workforce will be local residents.

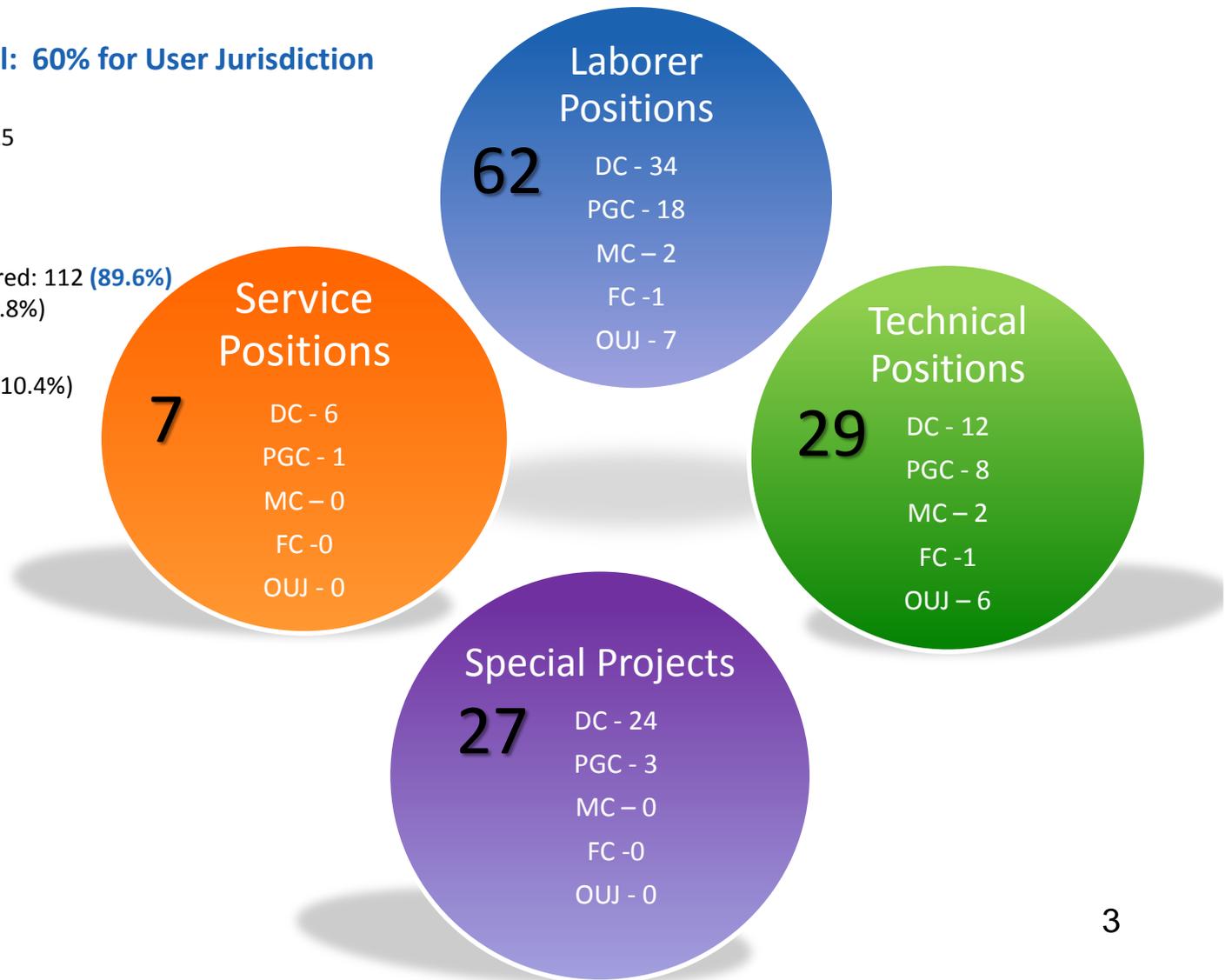
- Sixty percent (60%) of new jobs created by contracts or procurements entered into by DC Water with contractors will be filled by local residents.
 - New Jobs mean both union and non-union job openings, including vacancies created as a result of internal promotions, terminations or other separations, and expansions of the contractor's workforce.



New Opportunities filled through WaterWorks (October 1, 2016 – September 30, 2017)

DC WaterWorks New Hire Goal: 60% for User Jurisdiction

- Total Number of Positions Filled: 125
 - DC Water Works Hires: 51
 - Contractor Filled: 74
- Total User Jurisdiction Residents Hired: 112 (89.6%)
 - Total DC Residents Hired: 76 (60.8%)
- Total Outside User Jurisdiction: 13 (10.4%)

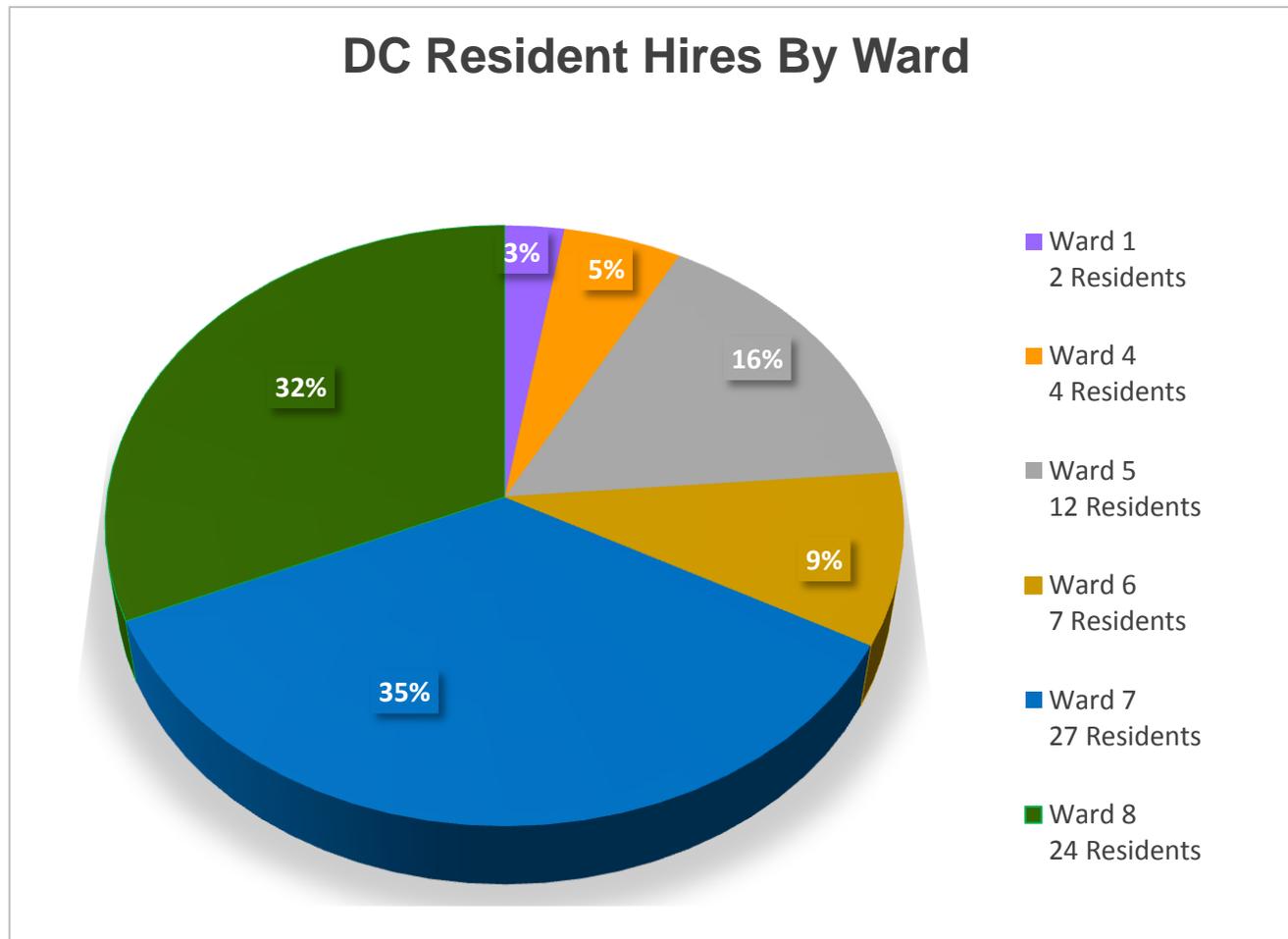




New Opportunities filled through WaterWorks (October 1, 2016 – September 30, 2017)

DC Resident Hires by Ward

Total DC Resident Hires: 76





DC WaterWorks Program

FY 2017 Outreach Activities

- **October 2016:** American Construction and Environmental Services Targeted Employment Fair (Ward 8) - 3 Participants Hired
- **December 2016:** Garfield Hills PSA 702 Employment Fair (Ward 8)
- **March 2017:** Community Services Agency of the Metropolitan Washington Council of the AFL-CIO Building Future Trades Pre-Apprenticeship Program (Ward 7)
- **March 2017:** Department of Employment Services Veterans Job Fair (Ward 7) – 1 Participant Hired with Aclara
- **May 2017:** Green Sector Job Fair (Ward 1) - 1 Participant Enrolled in the CDL Training Program (FY 18 Cohort)
- **August 2017:** iWork Job Fair (Ward 6)
- **August 2017:** Community Services Agency of the Metropolitan Washington Council of the AFL-CIO Building Future Trades Pre-Apprenticeship Program (Ward 7)
- **August 2017:** Congresswoman Eleanor Holmes Norton Job Fair, Walter E. Washington Convention Center (Ward 2) - 1 Participant interviewed by AKRF
- **September 2017:** Environmental Quality Resources, LLC (EQR)/AKRF Targeted Employment Fair (Ward 8) - 1 Participants Hired by EQR



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

Commercial Driver's License Training Program





Commercial Driver's License Training Program

- DC Water, through the Department of Facilities, conducted a CDL training program for thirteen (13) District residents.
- Participants earned \$15.00 per hour as Temporary Employees with MB Staffing.
- Corporate Partners Included:
 - Bulldog Construction
 - DC Line
 - Fleet Pro
 - K Neal Trucking
 - OAW Trucking
 - Monumental Concrete
 - Parts Authority

- FY 17 Goals:
 - 80% Graduation (10)
 - 50% Placement of the Graduates (5)

Results:

Completion:

- 10 Completed the Program (Goal Met)

Employment Status:

- All Participants Employed (Goal Met)





District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

Department of Facilities Summer Partnership Program





Department of Facilities Summer Partnership Program

- DC Water's Department of Facilities partnered with local community based programs to provide District residents with summer employment. This program also includes mentoring and basic training opportunities. Currently, Facilities is partnering with Sasha Bruce and the Earth Conservation Corps (ECC).
 - Participants get exposure to a variety of facilities trades: Carpentry, Building and Grounds, and Painting.
 - Summer Program ended September 30th

- In FY 17, there were four participants.
 - Two (2) participants who excelled in the summer program were invited to continue through the fall/winter.



District of Columbia Water and Sewer Authority
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Green Infrastructure



Spring 2017 Training – University of the District of Columbia
Green Roof



Green Infrastructure

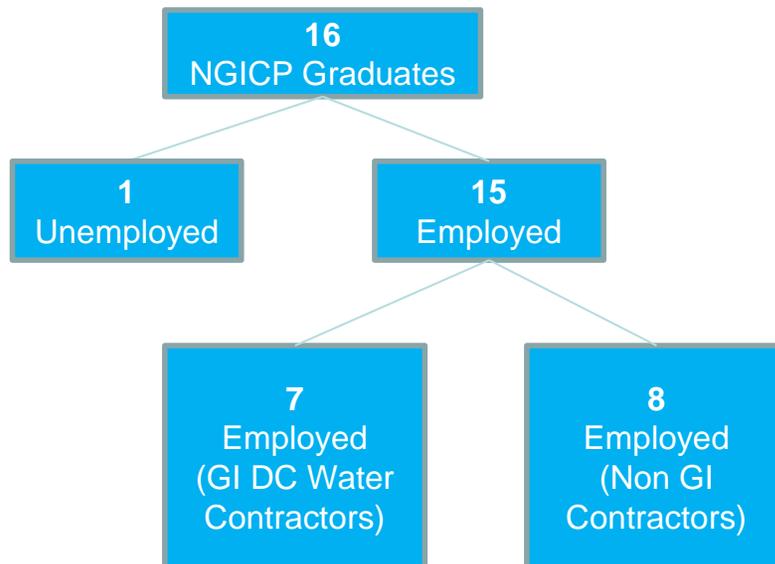
Pursuant to the MOU between DC Water and the District, there is a goal that **51%** of new hires on GI projects in the Rock Creek and Potomac River sewersheds with Green Infrastructure (GI) should be District residents.

DC Water partnered with the University of the District of Columbia and Washington Parks and People to train and prepare District residents to successfully complete the National Green Infrastructure Program (NGICP) exam.

Curricula was developed in partnership with DC Water, the Water Environment Foundation, and other partners across the nation.

In FY 2017, there were two cohorts.

Results:



- GI New Hire Goal: 51% District Resident
 - Achievement: 3 New Hires (Anchor Construction) to dates – all DC Residents (Goal Met)



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

Green Infrastructure

Raymond Coates – NGICP Certified, Hired by Anchor Construction



Rock Creek Project A Kickoff Event – October 23, 2017
Excerpt from Raymond Coates (NGICP Certified, Hired by Anchor Construction)



The Washington Post

District gets a vote of approval from Labor Dept. for improved job training

2017-09-08

The federal government has given the District a vote of confidence for what it called the city's success in enrolling more residents in job-training programs and improving handling of federal workforce grants.

The U.S. Department of Labor formally ended the District's designation as a "high risk" partner in job training and employment programs, a rarely used label the city has had since 2012, according to a letter the city received Thursday.

The change means the District will no longer be under increased federal oversight and at risk of suffering a slowdown in \$24 million of federal workforce grants that it receives each year.

The administration of Mayor Muriel E. Bowser (D) was eager to publicize the accomplishment as evidence that it has improved training opportunities for unemployed residents.

The mayor, who is widely expected to run for reelection to a second term, announced the decision by the Labor Department at a jobs event in Georgetown on Friday.

"It's a big deal," Bowser said afterward. "We think we have our house in order, and we can now try even bigger programs to get people working."

Deputy Mayor Courtney Snowden, who oversees the Department of Employment Services, or DOES, called the removal of the high-risk designation "an important validator that we are getting it right" for D.C. residents.

"I'm doing cartwheels in my office," she added.



FY 2017 DC Water Non-Major Construction Projects Employment Data

The following data summarizes the non-major construction employment data (Cumulative) for FY 17, as of September 30, 2017

In FY 17 (October 1, 2016 – September 30, 2017), there were:

- Thirty-Six (36) Active Projects
- 1,592 contractor job positions on Non-Major Construction contracts.
 - 1,161 positions (72%) were filled (transfers and new hires) by residents within DC Water’s User Jurisdiction.
 - 252 positions (15.8%) were filled (transfers and new hires) by District of Columbia residents.

	# of Positions	%
➤ User Jurisdiction	1,161	72.9%
○ DC	252	15.8%
○ PGC	600	37.7%
○ MC	151	9.5%
○ FC	157	9.9%
○ LC	1	0.1%
➤ Outside User Jurisdiction	431	27.1%
Total	1,592	



FY 2017 DC Water Major Construction Projects Employment Data

(e.g., Clean Rivers, Enhanced Nitrogen Removal, Tunnel Dewatering Pump Stations and Biosolids Management)

The following data summarizes the major construction employment data (Cumulative) for FY 17, as of September 30, 2017

In FY 17 (October 1, 2016 – September 30, 2017), there were:

- Thirteen (13) Active Projects
- 4,243 contractor job positions on Major Construction contracts.
 - 1,993 positions (47%) were filled (transfers and new hires) by residents within DC Water’s User Jurisdiction.
 - 485 positions (11%) were filled (transfers and new hires) by District of Columbia residents.

	# of Positions	%
➤ User Jurisdiction	1,993	47.0%
○ DC	485	11.4%
○ PGC	786	18.5%
○ MC	263	6.2%
○ FC	369	8.7%
○ LC	90	2.1%
➤ Outside User Jurisdiction	2,250	53.0%
Total	4,243	

Presented and Adopted: _____

SUBJECT: Approval to Authorize Henderson J. Brown, IV to act as the Chairperson of the Board of Directors for Blue Drop, LLC

**17-XX
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The members of the Board of Directors (“Board”) of the District of Columbia Water Sewer Authority (“DC Water”) at the Board meeting held on November 8, 2017, upon consideration of a joint use matter, decided by a vote of _____ (____) in favor and _____ (____) opposed, to take the following action to appoint the Chairperson of the Board of Directors for Blue Drop, LLC (“Blue Drop”).

WHEREAS, the General Manager and Chief Executive Officer George Hawkins has resigned from his position as the Chairperson of the Board of Directors for Blue Drop (the “Blue Drop Board”), effective the 4th day of January, 2018; and

WHEREAS, the Board desires to appoint the Interim General Manager and Chief Executive Officer of DC Water, Henderson J. Brown, IV, as an individual, as Chairperson of the Blue Drop Board for the remainder of the term established in Resolution #16-90, adopted on November 3, 2016.

NOW THEREFORE BE IT RESOLVED THAT:

1. Henderson J. Brown, IV, as an individual, is hereby appointed to serve the balance of the three year term described in Resolution #16-90, as the Chairperson of the Board of Directors for Blue Drop. Such appointment shall commence on the effective date of this Resolution, and shall end upon February 27, 2020, unless such appointment is terminated sooner by this Board, the Chairperson’s resignation, death, or intervening incapacity. As Chairperson, Mr. Brown is authorized to appoint/remove the Manager of Blue Drop in accordance with the organizational requirements, rules, and procedures of Blue Drop.
2. For the term described in paragraph 1, Henderson J. Brown, IV, as an individual, is appointed as the Member Representative of DC Water to the Blue Drop Board. This appointment may be terminated sooner by this Board, the Member Representative’s resignation, death, or intervening incapacity.

3. The Member Representative appointed herein shall report to the Board on the progress and operations of Blue Drop as he determines necessary, but no less frequently than annually.

This Resolution is effective immediately.

Secretary to the Board of Directors



Governance Committee Update

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY



December 13, 2017
Biju George, Chief Operating Officer



In this presentation, DC Water will:

- Review strategies for alternative revenue and monetizing IP
- Discuss formation of the Strategic Investments, Revenue and Opportunities Committee (SIROC)
- Discuss formation of the IP Monetization *Ad Hoc* Subcommittee of the Governance Committee
- Outline IP process and protocol development

In Executive Session, DC Water will:

- Provide an update on international activities and smart water efforts



Journey

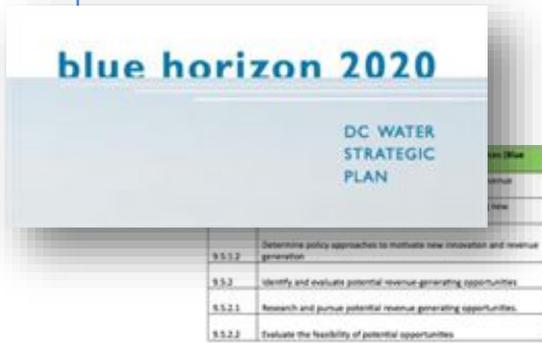
2013

2015

2016

Strategic Intent

Issued March 2013



Leverage innovation to develop alternate revenue sources

Strategic Direction

From Board Retreat Nov. 2015

1. Maximizing revenue by leveraging existing capital assets
2. Developing alternative revenue by leveraging intellectual capital
3. Building "Blue Drop" as a vehicle to implement alternative revenue strategies

- Leverage Existing Assets (Capacity)
- Intellectual Capital
- Blue Drop (Marketing)

Strategic Progress

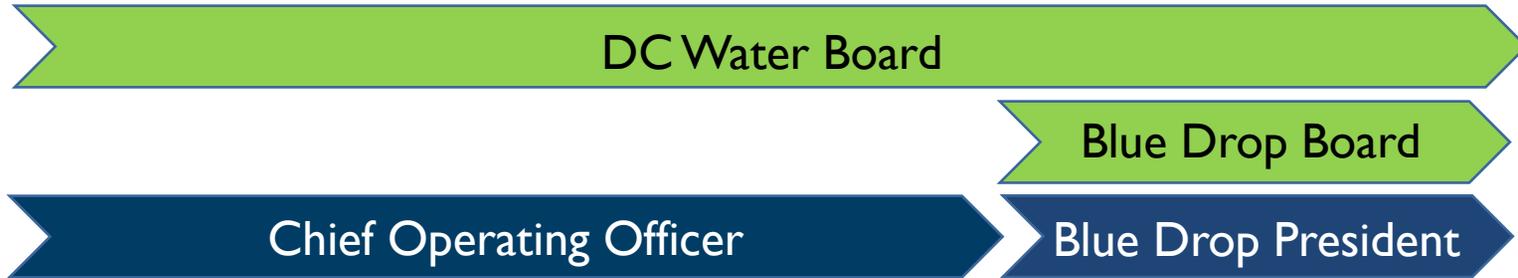
From Board Retreat Dec. 2016





How does DC Water Govern Revenue Activities?

Three parallel tracks:



AGM Blue Plains

- Blue Plains WWTP
- Resource Recovery and Renewable Energy
- Rent Unused Capacity or Structures



Innovations Chief

- Water/Wastewater Process Innovation
- Smart Systems (leveraging sensors and analytics)



Blue Drop

- Bloom™ Marketing
- Consulting and Shared Services
- Utility peer-to-peer portal





Revenue Strategy Review



This presentation will cover both elements of the strategy to leverage intellectual capital

* From 2015 Strategy Map as presented at the 2016 Board Retreat



DC Water's Intellectual Property

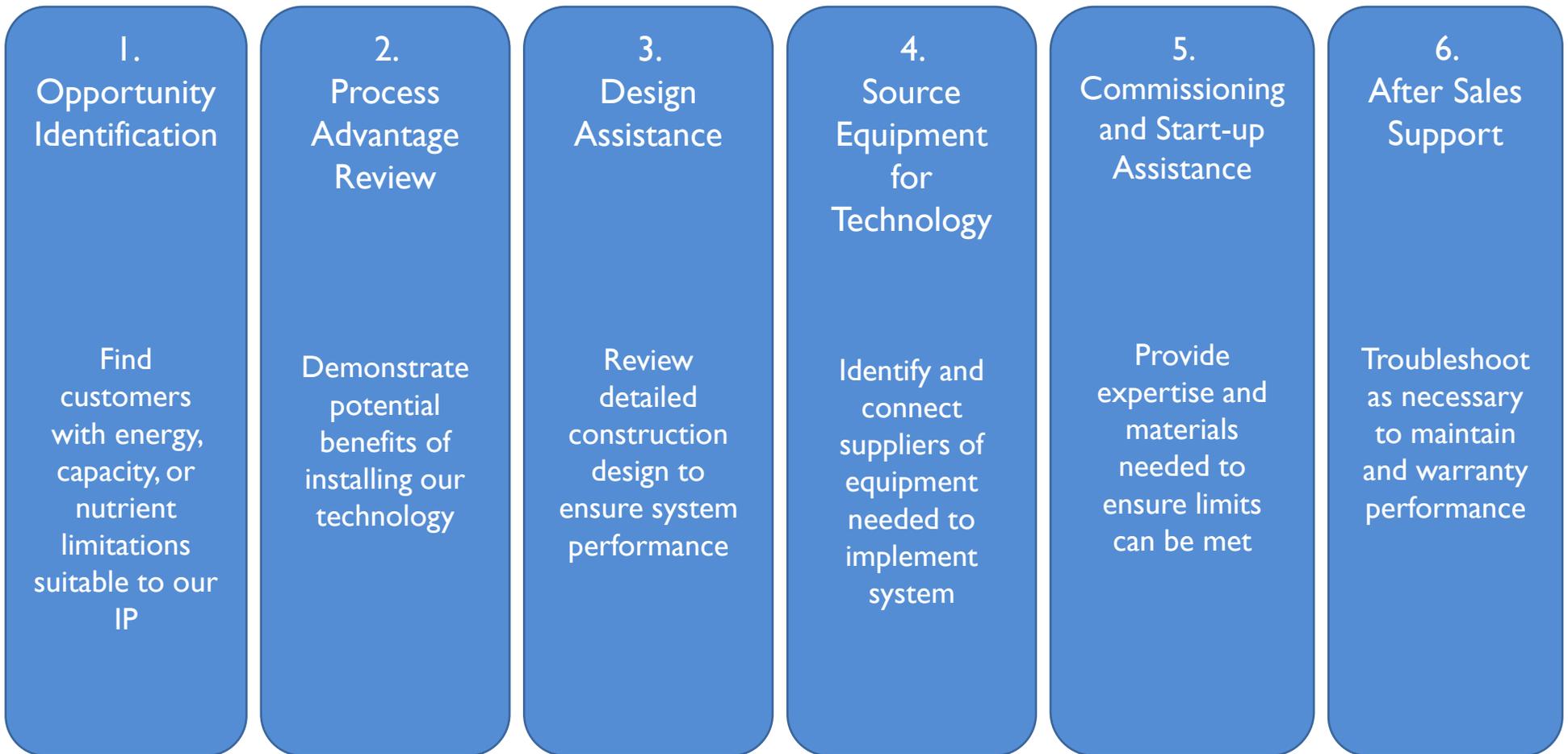
- 💧 Intellectual Property (IP): creations of the mind, such as inventions, literary and artistic works, designs, and symbols, names, and images used in commerce
- 💧 IP types: patents, trademarks, copyrights, and trade secrets
- 💧 DC Water's IP: Core to our strategic plan and vision
 - Includes patents, patent applications, and know-how
 - 9 Granted patents, 7 in progress, and 3 provisional patents¹
 - IPs and associated technologies are collaborative partnership efforts

1. A legal document filed in the United States Patent and Trademark Office (USPTO), that establishes an early filing date, but does not mature into an issued patent unless the applicant files for a regular, non-provisional patent application within one year. 6



What does marketing IP entail?

- 💧 IP commercialization incurs costs at multiple phases
- 💧 Requires market review and assessment





What are DC Water's guiding principles?

💧 Guiding Principles to Date:

- Exploration of opportunities before making commitments
- Maximize revenue while minimizing risk

I. Minimize Financial Risk to DC Water

- Share and transfer risk
- Contract with American entities operating overseas
- Limit liability through caps in contracts
- Learn operating rules of host countries

2. Maximize Revenue to DC Water

- Create multiple, diverse revenue streams
- Build a complete technology portfolio
- Identify partners with existing capabilities and market presence



How have we addressed opportunities?

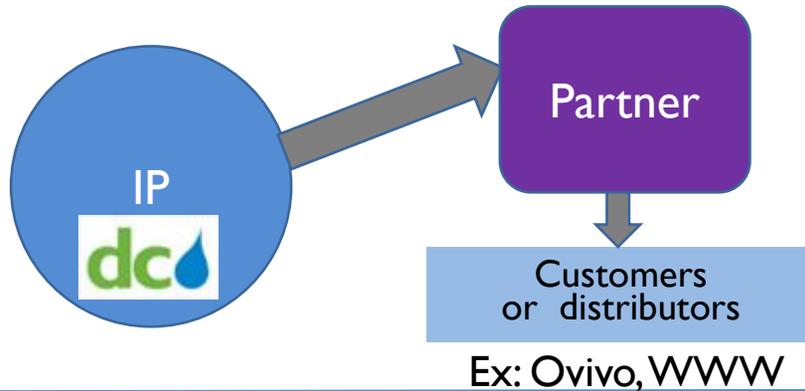
- Find ways to minimize IP marketing expenses
- Example: Old Plant #3 in Kunming, China



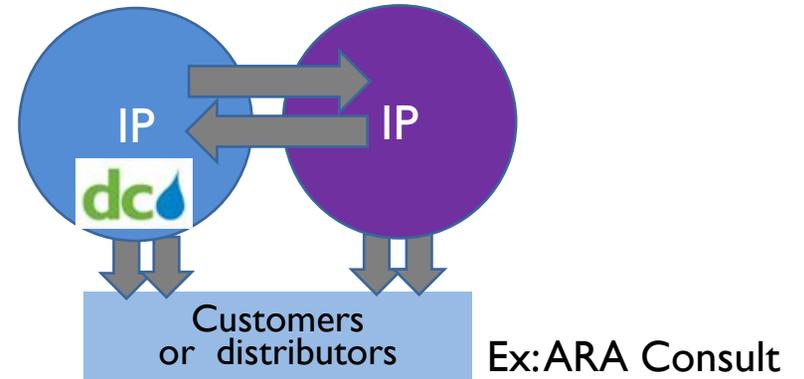


What IP Strategies Exist?

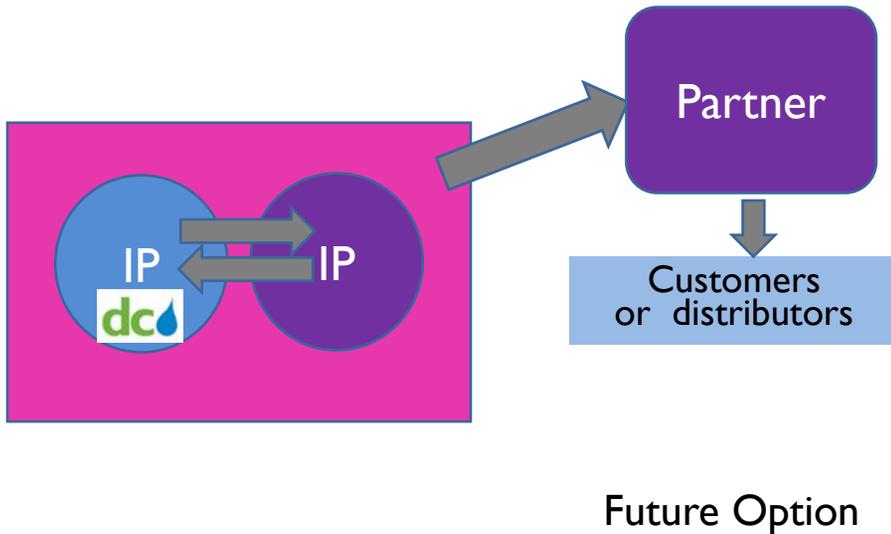
1. Licensing (two approaches)



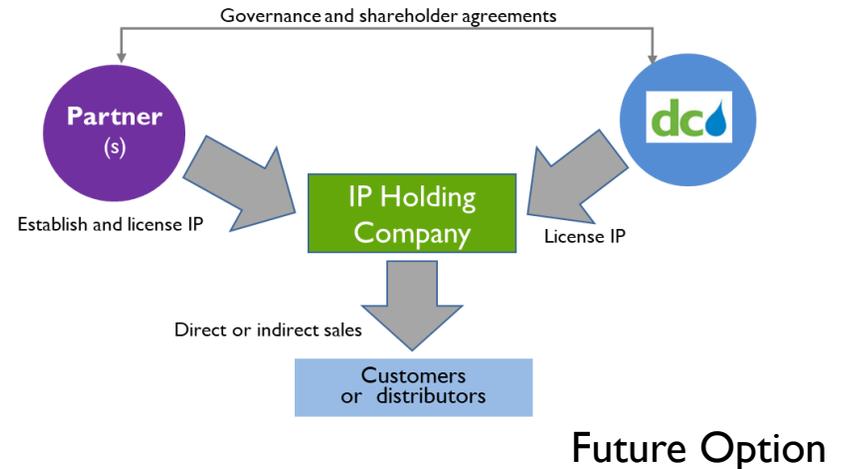
2. Joint Licensing



3. Technology Integration



4. IP Holding Company





Strategic Investments, Revenue and Opportunities Committee (SIROC)



What is the SIROC?

Draft Mission Statement:

The Strategic Investments, Revenue and Opportunities Committee (SIROC) shall develop strategies, direct, and oversee efforts designed to deliver enhanced value to DC Water customers. The SIROC shall establish and guide annual business and innovations strategies, and review opportunities to generate non-ratepayer revenue or to expand current services.

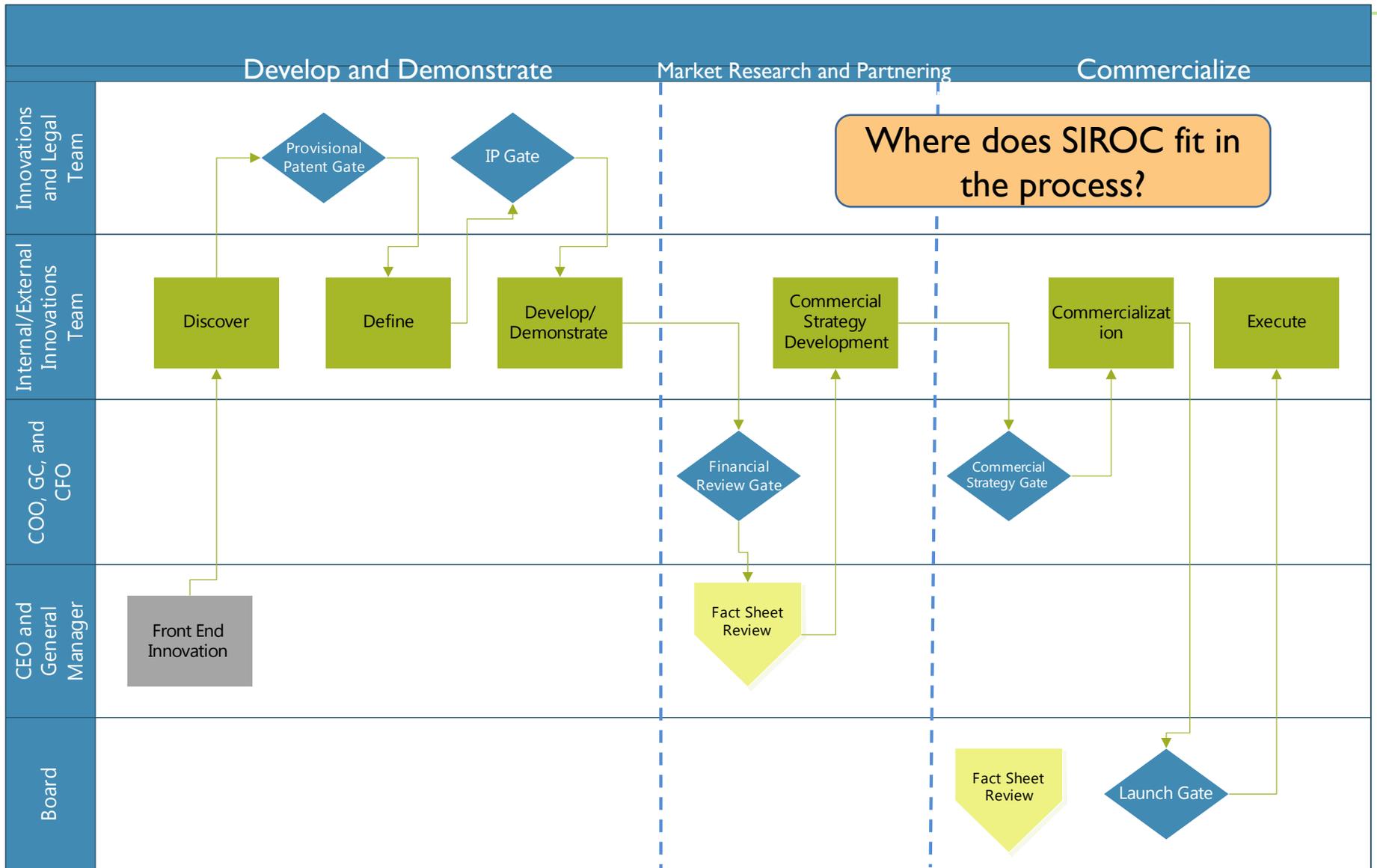
Tasks:

- Develop annual agendas and targets for non-ratepayer revenue
- Advance idea generation, opportunity validation, and concept development for the “front end” of innovation
- Approve budgets, portfolios, and resource allocations for SIROC efforts
- Approve protocols to incentivize employee ingenuity that contributes to non-ratepayer revenue
- Approve marketing, partnering, and commercialization strategies
- Develop key performance indicators for SIROC activities

Draft charter will be approved at
next SIROC Meeting



Current Process and Approval



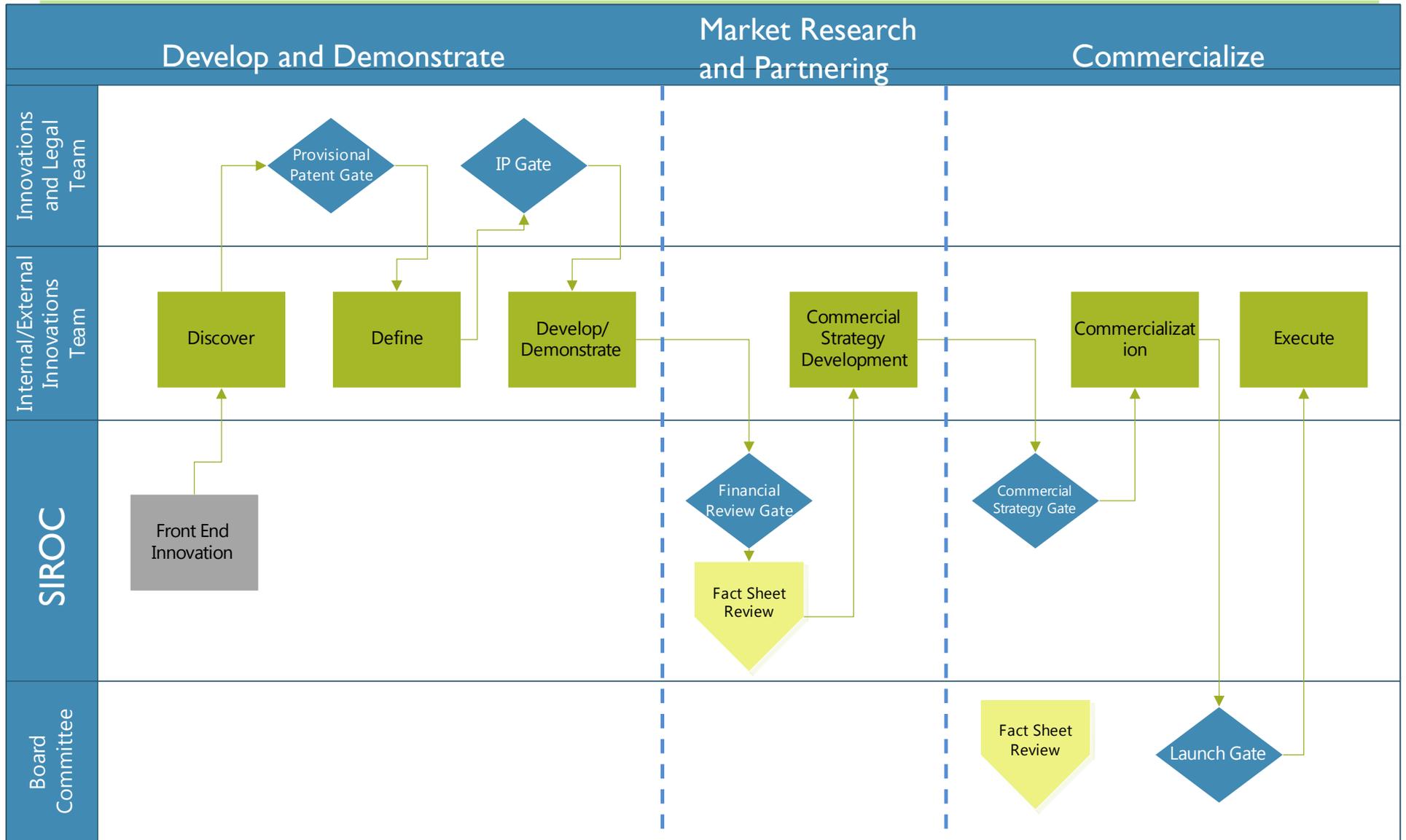
Documentation required

- Approval for IP Initiation
- Approval for IP filing
IP Declaration
IP Assignments
Royalty sharing agreement

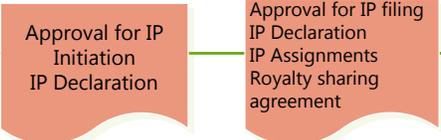
*Not every idea will proceed sequentially through each step. Phases may be combined as necessary for individual projects



IP Process and Approval



Documentation required



*Not every idea will proceed sequentially through each step. Phases may be combined as necessary for individual projects



IP Monetization *Ad Hoc* Subcommittee of the Governance Committee



IP Monetization *Ad Hoc* Subcommittee of the Governance Committee

- Intellectual Property (IP) Monetization *Ad Hoc* Committee:
 - Shall be composed of representatives from the Board's Standing Committees and shall make recommendations to the Governance Committee, which in turn, shall make recommendations to the Board, regarding actions required to develop, commercialize, and market DC Water IP as an additional revenue stream created to offer value and benefits to ratepayers. The *Ad Hoc* Committee shall establish policy and strategy derived fundamentally from Blue Horizon 2020 and Board recommendations. It shall:
 1. Review and advise on developing matters related to IP monetization activities;
 2. Measure progress in monetizing current and future IP business;
 3. Ensure complete transparency of costs associated with IP monetizing efforts;
 4. Develop a framework for calculating returns on the investment of time and fiscal resources devoted to IP monetization efforts
- Goal setting, establishing protocols for measuring performance, and ensuring transparent, timely reporting of monetization opportunities and providing guidance will be the committee's primary focus, not authorizing individual transactions.



IP Process and Protocol Development



How did we develop and manage IP?

- DC Water has conducted core R&D through open innovation to enhance our processes and operations, and it has resulted in a portfolio of intellectual properties
- DC Water is finalizing the outstanding ownership and royalty sharing agreements quickly to advance commercial opportunities
- For future IPs, DC Water will develop protocols to evaluate opportunities and process for IP development with an intent to commercialize



Open Innovation and R&D

- DC Water has practiced open innovation for research and development with universities, utilities, manufacturing and consultants
- R&D has been conducted for benefit of DC Water
- DC Water royalty agreements were modeled after typical University process





Examples: AvN and Manhole Lifter

AvN External Royalty Agreement

- Memo to GMs dated January 15, 2014
- Lists inventors
- Documents concept development and partnering including costs
- Concludes each is an equal contribution and allocates 33.5% to DC Water, 33.5% to HRSD, and 33.0% to ARA Consult

Manhole Lifter Internal Royalty Agreement

- Memo to GM dated January 26, 2015
- Lists inventors
- Documents agreement on DC Water's ownership
- Allocates 70% to DC Water and 30% to inventors



Status & Next Steps

- 💧 For existing IPs, inventors will determine and document appropriate allocations for review and approval by the SIROC. All missing assignments and royalty agreements will be in place as soon as possible.
- 💧 For future IPs, DC Water will establish IP development processes and protocols to evaluate opportunities, share royalties, and manage generated IP
- 💧 SIROC will approve process and protocols for IP management at a future meeting
- 💧 DC Water will solicit feedback from IP *Ad Hoc* Committee and present to the Governance Committee