### Offsite Storm Water Alternative Compliance Program: Progress Update (TAC 7 Meeting)





## **Progress Update Agenda**

### Opening Remarks

- Overview of Offsite Storm Water Alternative Compliance Program
- Review of Program Development
- Progress Update [TAC Meetings 1 to 6]
- Ongoing and Next Steps
- Public Involvement Future Opportunities



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### **Purpose of Progress Update Meeting**

- Update on development of offsite storm water alternative compliance program through FY-2016 and first half of FY-2017.
- Lay out plan for completing and implementing the program.
- Obtain input from additional stakeholders and public participants.

### **Overview of Offsite Storm Water Alternative Compliance Program**





## What is Alternative Compliance

### Method of storm water mitigation

Allowed as part of San Diego's 2013 Municipal Storm Water Permit in Section II.E.3.c.(3)

### **Optional program** with specific requirements

- Offsite structural Best Management Practices (BMPs)
- > Reduce post-development storm water impacts
  - Water Quality: Pollutant Control
  - Hydromodification: Flow Control



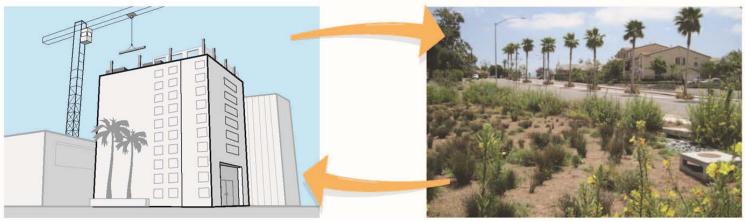
## PDP and ACP

### Priority Development Project (PDP)

Exceeds square footage threshold of impervious surface and/or supports specific uses (requires numerically-sized structural BMPs)

### Alternative Compliance Project (ACP)

Implemented in lieu of structural BMPs onsite; flow-thru BMPs onsite



PDP



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ACP



### Why consider Alternative Compliance

# Potential benefits to the City of San Diego and its stakeholders include:

- > Water Quality
  - Improvements to water quality for discharges generated by existing development
- Concurrent Compliance with Multiple Regulations for Storm Water Discharges
  - o Regional MS4 Permit
  - Clean Water Act Sections 401 and 404
  - o California Department of Fish and Wildlife Section 1602
- Flexibility for Land Development



### Why consider Alternative Compliance

### Potential Benefits

Flood Control

Habitat Restoration



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### **Why consider Alternative Compliance**

### Potential Benefits

- Aesthetic and Pedestrian Improvements
- Education
- ➢ Recreation
- ➢ Reliability of BMPs
  - o Ease of maintenance
  - Ease of inspection by City staff



Source: https://42mzqz26jebqf6rd034t5pef-wpengine.netdna-ssl.com/wp-content/uploads/ 2011/10/asla\_pa11\_sandiegoriver\_02.jpg



## What type of projects

### Structural BMPs

Retrofit BMP
Regional BMP
Water Supply BMP

### Natural System Management Practices

Stream Rehabilitation
Land Restoration
Land Preservation







### **Structural BMPs**

### Retrofit BMP

Adds or modifies structural BMPs in areas of existing development where practices do not already exist, are ineffective, or can be significantly enhanced





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### **Structural BMPs**

### Regional BMP

- Treats Stormwater from a tributary consisting of more than one development.
- > Has the potential to function as a Multiuse Treatment Area (MUTA)



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### **Structural BMPs**

### **\***Water Supply BMP

Captures storm water and infiltrates, pumps, or otherwise replenishes groundwater, surface water reservoirs, or other water supply systems.





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### **Natural System Management Practices**

### **Stream Rehabilitation**

restores a stream to a natural, stabilized condition that can accommodate both legacy and future hydromodification impacts





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### **Natural System Management Practices**

### **\*Land Restoration**

Permanently restores currently developed land back to a stabilized predevelopment condition



Source: https://www.flickr.com/photos/portofsandiego/5303189753/in/album-7215 762 5699596922



Source: http://sandiegoriver.org/images/photos/rivergarden.jpg



### **Natural System Management Practices**

### \*Land Preservation

Permanently preserves undeveloped land in its current state.



Source: https://kpbs.media.clients.ellingtoncms.com/img/photos/2012/11/30/SD\_Canyon \_t700.jpg?f4 0c0e74 b997dbb 01ce524758e0d04a31382c8af



Source: http://sandiegoriver.org/images/photos/upperriver.jpg

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## What are the requirements

- Onsite, flow-thru treatment control BMPs, Plus the ACP:
  - Iocated in the same watershed and within the City of San Diego jurisdiction,
  - provide greater water quality benefits, and
  - include funding for ongoing operations and maintenance.





### **Questions and Discussion**

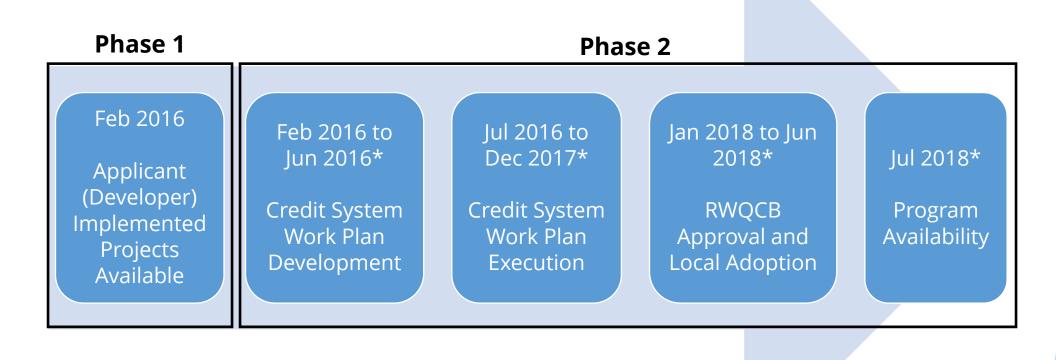


### **Review of Program Development**





## **Program Development Timeline**

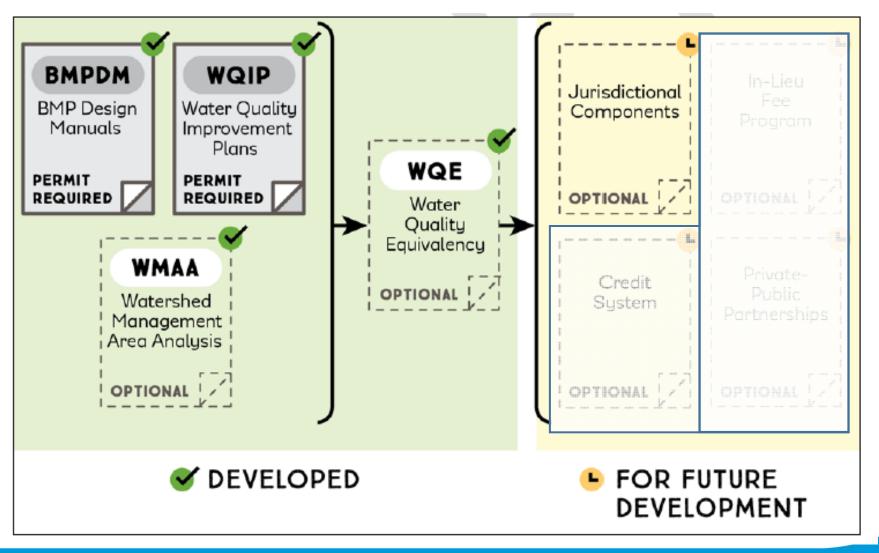


#### \* Draft timeline and is subject to change

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### **Overall Program Implementation Process**



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## **Storm Water Standards Manual**

- Technical guidance for complying with 2013 Permit
- Part 3 of City's BMP Design Manual



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Storm Water Standards

#### PART 3

Offsite Storm Water Alternative Compliance Program For Water Quality and Hydromodification Control

February 2017 Edition

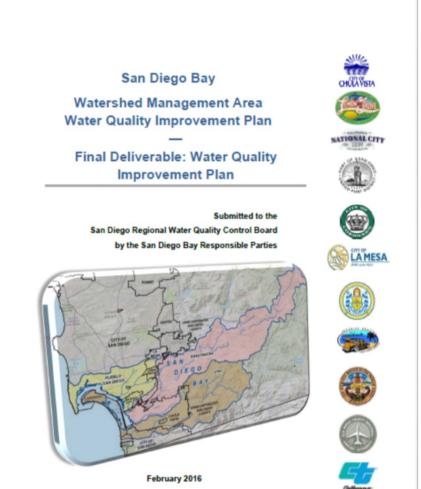
Prepared by:

Geosyntec<sup>D</sup>

The City of SAN DIEGO

### Water Quality Improvement Plans (WQIPs)

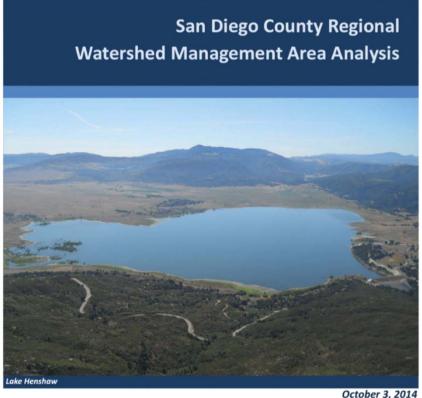
- Improve water quality in MS4 discharges and receiving waters
- Establish priorities and goals
- Propose implementation strategies





### Watershed Management Area Analysis (WMAA)

- Information on physical characteristics of WMA
- Candidate watershedscale projects
- Identify hydromodification exemptions







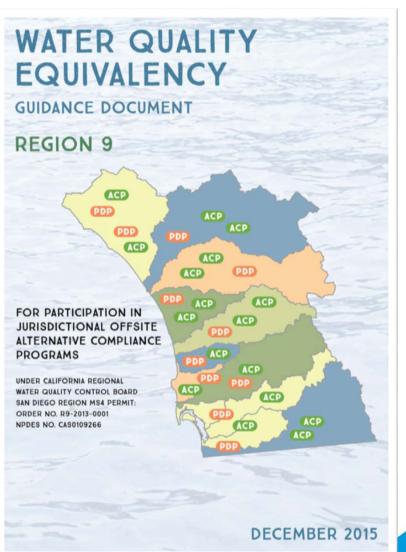
Prepared by: Geosyntec consultants RECENT

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### Water Quality Equivalency (WQE) Document

- Automated WQE calculation worksheets
   Assess benefits of different structural BMPs and NSMPs
- Evaluate equivalent offsite mitigation projects





## **Program Development Process**

#### **<u>Regional Elements</u>**

- Watershed Management Area Analysis (Feb 2016)
- Water Quality Equivalency (WQE; Dec 2015)
- Additional WQE (Future tasks)
  - Onsite Alternative Compliance
  - Flow-thru Treatment
     Efficiency
  - Partial Hydromodification

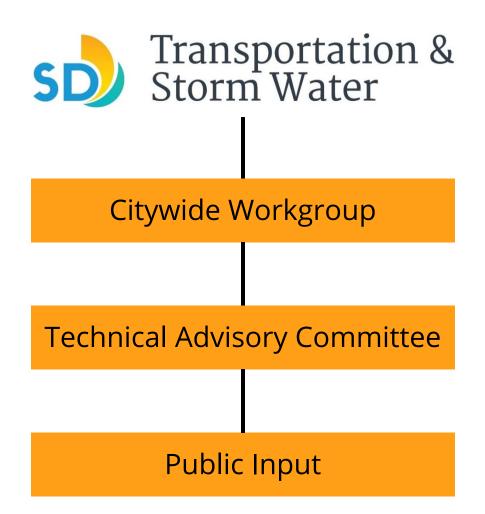


- Phase 1: Applicant (Developer) Implemented Projects
- Phase 2: Credit System\*

\* To be developed through the City TAC effort



### **Program Development Process**

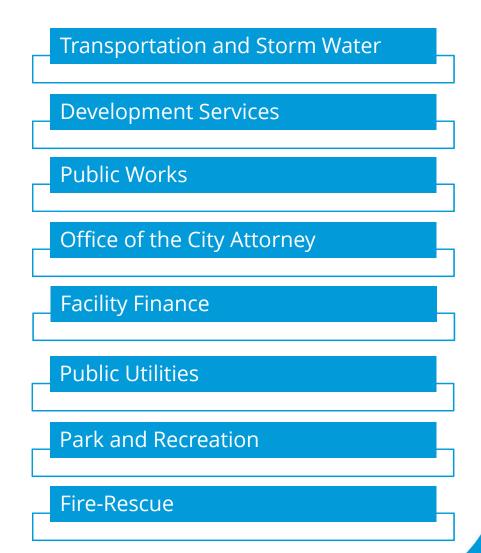




## Citywide Workgroup

### Members assure operability

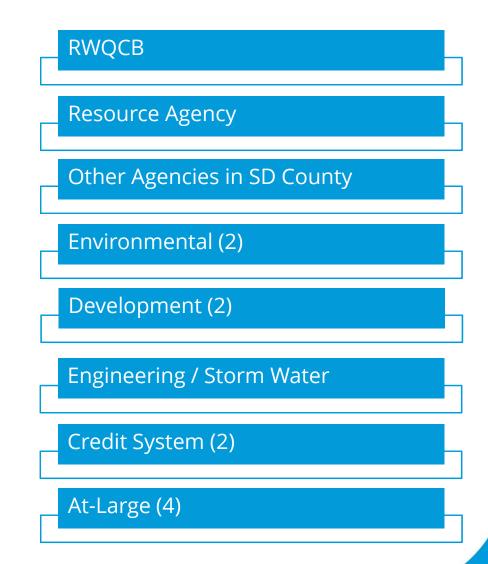
- Attend technical advisory committee meetings
- Participate in the public process
- Provide real-time feedback regarding impacts to City procedures and operations, and
- Meet on a monthly basis to shape the program





## **Technical Advisory Committee (TAC)**

- Involves key stakeholders
   12 public meetings, bimonthly
  - Open to all, with comment opportunities
  - ≻ Feb 2016 to Dec 2017





### Public participation shapes the process

- Meetings
  - ➢ February 2017
  - ➢ October 2017\*

Opportunities for written comments:

- Public review of Draft Program Standards: October 2017\*
- City Planning Commission: Early 2018\*
- City Council Meeting: Early 2018\*
- Regional Water Quality Control Board Review
- \* Draft timeline and is subject to change

### Progress Update [Technical Advisory Committee Meetings 1 to 6]





### **Process update: where we are**

- Mid-point in the TAC process
- Six meetings, February 2016 through December 2016
- Today is meeting seven
- Each meeting focuses on one key element of alternative compliance
- Each meeting allows TAC members and the public to provide feedback



## **Progress update: TAC 1-3**

Established TAC and work plans for In-Lieu Fee Program and Credit Trading Program

### In-Lieu Fee Program

- Direct payments by applicants to fund City-led offsite projects.
- Fee covers design, construction, and ongoing maintenance.

- Credit Trading Program
  - Allows generation of credits by City or private entities.
  - Provides rules for exchanging credits between buyers and sellers.
  - Must be approved by Regional Board.

Selected as Preferred Alternative



## **Credit Program Basics**

- Credits generated by installation of:
  - Structural BMPs
  - Natural System Management Practices (NSMP)

#### Credits purchased/exchanged by:

- City and Developers redeem for compliance
- Brokers/Aggregators bundle for resale
- Environmental Advocacy Groups retire for net environmental benefit



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## **Progress update: TAC 4-6**

- Began Executing Credit System Work Plan
- Guest Presentations
  - Evaluation of Potential Types of ACPs
  - Army Corps Mitigation Rule
  - Lessons Learned from Other Credit Programs
- Evaluated Credit System Characteristics
- Collected Case Study Data
  - ≻ Cost
  - Design Information
- Presented Initial Case Study Results

### Initial Findings and Preliminary Conclusions

- Credit program allows fastest path towards Phase 2 implementation
- Water quality benefit of offsite BMPs significantly exceeds water quality benefit of onsite BMPs
- Cost of offsite BMPs, per impervious acre treated, compare favorably to onsite BMP cost

### **Questions and Discussion**



### **Ongoing and Next Steps**





## Draft Program Docs-Under Development

- Document program rules
- Provides guidance for participation
- Requires approval by Regional Board

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Offsite Storm w	OFFSITE STORM WATER
<b>Alternative Con</b>	ALTERNATIVE COMPLIANCE PROGRAM
Alternative Con	Contents
Dueguene Stand	Notes to Reviewers
Program Standa	Contents
	1. Introduction
	Relationship between City program and other programs     Policy and Authority
	2.1 Policy
40 cm	2.2 Authority
	3. Trading Basics
<b>Annotated Outline</b>	3.1 Pollutant Control Credits
Annotated Outline	3.2 Hydromodification Flow Control Credits
	3.4 Market Structure
	4. Eligibility
	4.1 Credit Generators
	4.2 Credit Buyers
	4.3 Credit Aggregators
December 14, 2016	5. Credit Characteristics
December 14, 2010	5.1 Quantification
	5.2 Credit Unit
	5.3 Multi-Purpose Credits
	5.4 Credit Life
Prepared by:	5.5 Credit Expiration, Retirement, and Renewal
CoorentaaP	5.7 Credit Disbursement
Geosyntec <sup>▷</sup>	6. Program Implementation and Assurance
consultants	6.1 Program Quality Standards
	6.2 Project Screening
Michael Baker	6.3 Project vermation
	7. Long Term Maintenance
	8. Tracking
	9. Compliance and Enforcement
	10.1 Program Adaptive Management 10.1 Program Improvement and Updates
	10.2 Program Performance
	11. Appendices
	Appendix A: Exhibits Appendix B: Credit Calculation Tool
	Appendix B: Credit Calculation Tool Appendix C: Model Baking Instrument
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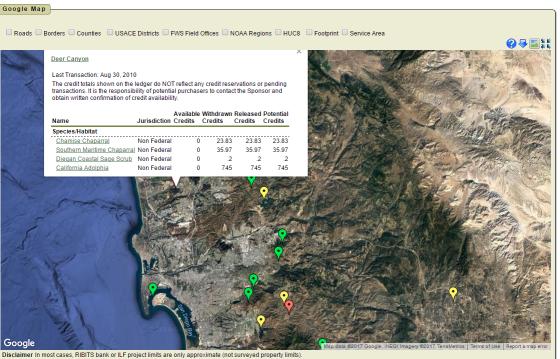
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### **Tracking System Options-Under Development**

- Facilitate transactions and provide transparency, ensure compliance, facilitate annual reporting by tracking:
  - Credit generation
  - Credit redemption
  - Credit transactions
  - Available credits







## Next Steps: TAC 8-12

- Project submittal and tracking tool
- Draft credit program standards
- Legal agreements for system implementation
- Phase 2 Public Workshop
- Final program development meeting

### **Public Involvement: Future Opportunities**





## **Public Participation Opportunities**

◆ TAC Meetings are open to the public
 > April 19, 2017\*

- ≻June 7, 2017\*
- ≻ August 16, 2017\*
- > October 4, 2017\*
- > December 8, 2017\*

\* Draft timeline and is subject to change



## **Public Participation Opportunities**

- ✤ Meetings➢ October 2017\*
- Opportunities for written comments:
  - Public review of Draft Program standards: October 2017\*
  - City Planning Commission: Early 2018\*
  - City Council Meeting: Early 2018\*
  - Regional Water Quality Control Board Review
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## **Program Contact**

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