# Sacramento Stormwater Quality Partnership Low Impact Development

November 4th, 2015



#### Sacramento Municipal Stormwater NPDES Permit

- County of Sacramento
- Cities of:

Sacramento

Citrus Heights

Elk Grove

Folsom

Galt

Rancho Cordova

- First Permit issued in 1990
- Five-year permit
- Current Permit Limited Term (18 months)
- Next Permit: early 2016

# Planning and New Development Element Permit Requirements

- Source Controls
- Treatment Controls
- Hydromodification Mitigation
- Low Impact Development (a year from HMP approval)

#### Permit Language (2008 Permit)

Low Impact Development Requirements:

Each Permittee shall amend, revise or adopt quantitative and qualitative development standards (including policies, codes, ordinances and/or regulations) to require implementation of LID strategies at priority new development and redevelopment projects no later than six months after approval of the HMP by the Regional Water Board.



### STORMWATER QUALITY DESIGN MANUAL



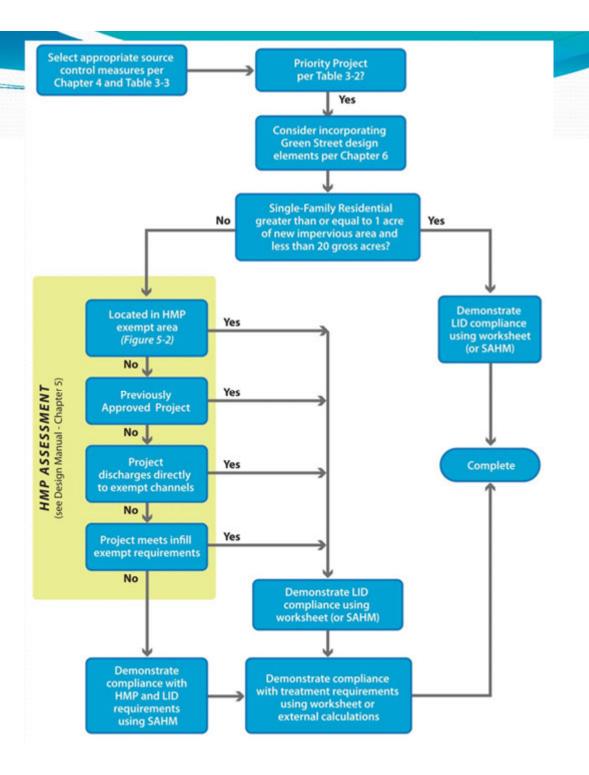
Integrated Design Solutions for Urban Development

Protecting Our Water Quality



City of Citrus Heights City of Elk Grove City of Folsom City of Galt City of Sacramento County of Sacramento

#### Flow Chart



#### LID Measures

- Alternative Driveways
- Capture and Use
- Compost Amended Soil
- Disconnected Roof Drains
- Interceptor Trees
- Porous Pavement
- Bioretention/planter
- Vegetated Swale/ filter strip
- Green Roof
- River Friendly Landscaping



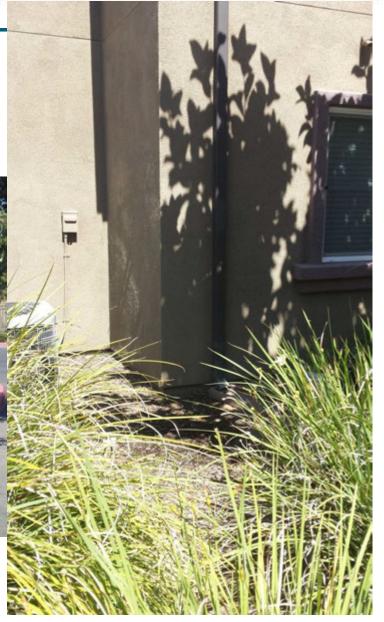
## Local Examples

#### Hollywood Driveways-South Land Park



#### Disconnected Roof Drains-Elder Creek Road





# Greyhound Station - Richards Blvd Award Winning!



#### Vegetated Swale - Bruceville Road



#### Dixieanne Avenue – 1st Green Street



#### Freedom Park Drive Green Street





#### Freedom Park Drive



#### Promenade- Fair Oaks



#### Citrus Heights City Hall



#### Bioretention Planters- Railyards



#### Sand Filter -City of Sacramento, Department of Utilities



#### Lessons Learned

- Soil amendment
- Adequate slope
- Vegetation/Plants
- Proper construction
- Proper implementation
- Maintenance



# Swale bottom width: no slope/ dead vegetation



#### Curb-cut on the wrong side!



#### Solutions!

• At improvement plans phase:

"City requires Engineer inspection and certification upon completion of the Stormwater Facility to ensure the facility is built per plans. Certification letter should be mailed to City of Sacramento Department of Utilities Water Quality Section (1395 35<sup>th</sup> Ave, Sacramento, CA 95822) for City records."

### **During Construction**



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#### **Contact Info:**

Dalia Fadl
City of Sacramento
Department of Utilities

Email: <u>dfadl@cityofsacramento.org</u>

Phone: 916-808-1449

