



**LODI CITY COUNCIL**  
**Carnegie Forum**  
305 West Pine Street, Lodi

**"SHIRTSLEEVE" SESSION**

**Date: July 15, 2008**

**Time: 7:00 a.m.**

For information regarding this Agenda please contact:

**Randi Johl**

**City Clerk**

**Telephone: (209) 333-6702**

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**Informal Informational Meeting**

**A. Roll Call by City Clerk**

**B. Topic(s)**

B-1 Storm Water Development Standard Plans and Inspection Fee (PW)

**C. Comments by Public on Non-Agenda Items**

**D. Adjournment**

Pursuant to Section 54954.2(a) of the Government Code of the State of California, this agenda was posted at least 72 hours in advance of the scheduled meeting at a public place freely accessible to the public 24 hours a day.

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Randi Johl  
City Clerk



# CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Storm Water Development Standard Plans and Inspection Fee  
**MEETING DATE:** July 15, 2008 (Shirtsleeve Session)  
**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** Receive information presented by John Teravskis of WGR Southwest on the implementation of the Storm Water Development Standard Plans as required by the State Water Resources Control Board and on setting the inspection fee.

**BACKGROUND INFORMATION:** The State Water Resources Control Board issued the City of Lodi Permit WDID No. 5B39NP00028 that governs the discharge of storm water runoff. A condition of that permit requires the adoption of development and redevelopment design standards per Attachment No. 4 of the State's General Discharge Permit. These standards were scheduled to be in place by May of 2007.

The Public Works and Community Development Departments have been working with WGR Southwest, a local firm with expertise in this area, on developing standard plans (DSP) that would comply with the requirements of the State's Attachment No. 4. The DSP addresses all new development and qualifying "significant redevelopment". New development project categories that trigger DSP are defined as commercial developments of over 100,000 square feet, automotive repair shops, retail gasoline outlets, restaurants, parking lots of over 5,000 square feet or 25 spaces, and home subdivisions of more than ten units. Significant redevelopment is defined as creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Staff has held several meetings with members of the building industry and has met with the Executive Officer of the Building Industry Association (BIA) to discuss these changes.

These standards require an annual inspection of the post construction Best Management Practices (BMP's) to confirm they are being maintained and operated correctly. The proposed \$122 inspection fee is the same fee charged for construction inspections related to erosion control during construction. The property owner would be billed for each inspection when completed. Should a site require multiple inspections, that expense would also be billed. The inspection fee would be subject to inflationary price adjustments. Subdivision developments would be required to establish an assessment district to address the inspection of post construction BMP's. These properties would be tracked by GIS plotting and recorded with the County Assessor's Office.

A copy of the final document is available in the offices of the Public Works and Community Development Departments.

**FISCAL IMPACT:** The cost of implementing these required State standards would be borne by the developers of all new development and qualifying significant redevelopment. Ongoing annual inspections will be billed to the property owner when service is rendered.

**FUNDING AVAILABLE:** Not applicable.

\_\_\_\_\_  
 F. Wally Sandelin  
 Public Works Director

Prepared by George M. Bradley, Streets & Drainage Manager  
 FWS/GMB/dsg  
 cc: Charles E. Swimley, Jr., Water Services Manager  
 Curt Juran, Assistant Streets & Drainage Manager  
 Dennis Canright, Building Official

**APPROVED:** \_\_\_\_\_  
 Blair King, City Manager

State's Requirements

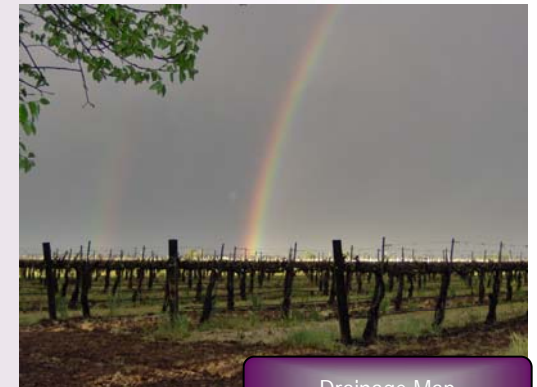
Lodi's DSP

What is the DSP?

Applicability



# City of Lodi Storm Water Development Standards Plan



BMPs

Sizing

Implementation

Summary

Drainage Map

# *The Development Standards Plan (DSP) is mandated by the State of California ...*

- As part of Phase II, the State Water Resources Control Board adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities.
- Lodi was identified by the State as one of these small MS4s and, therefore, prepared a Storm Water Management Plan (SWMP) in January 2003.
- This DSP was prepared in accordance with the requirements contained in the City's MS4 permit (Attachment 4) and the SWMP.


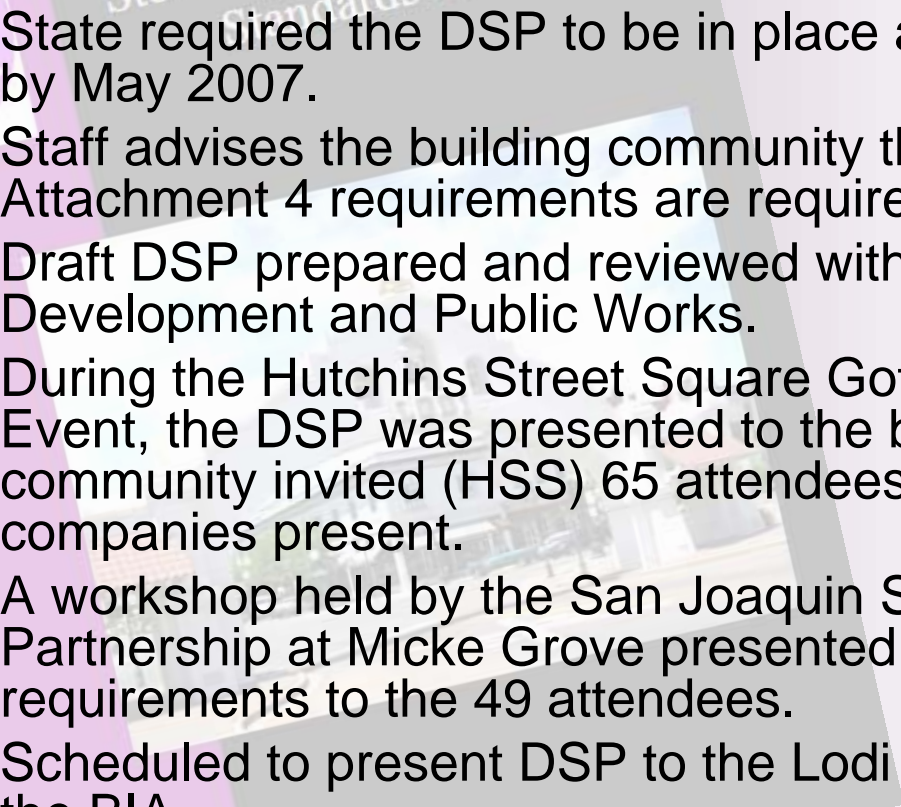
# *The Development Standards Plan (DSP) is mandated by the State of California ...*

- All Phase I cities (Stockton, the Port of Stockton, Sacramento) and many Phase II cities (San Joaquin County, Tracy, Lathrop, Manteca) have already implemented their version of the DSP. Developers who do work in these other cities or in the County have already had to comply with these regulations for, in some cases, several years.



# Lodi's DSP

## Calendar of Events

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- 
- April 2006 - State required the DSP to be in place and enforced by May 2007.
- July 2006 - Staff advises the building community that Attachment 4 requirements are required.
- April 2007- Draft DSP prepared and reviewed with Community Development and Public Works.
- August 2007 - During the Hutchins Street Square Got SWPPP Event, the DSP was presented to the building community invited (HSS) 65 attendees – 5 different companies present.
- October 2007- A workshop held by the San Joaquin Storm Water Partnership at Micke Grove presented the DSP requirements to the 49 attendees.
- July 2008 - Scheduled to present DSP to the Lodi Task Force of the BIA.

# *How does Lodi's plan **compare** with other local plans ?*

- Lodi's Plan is *similar* in that it:
  - Follow's the Small MS4 permit Attachment 4 requirements.
  - Uses the same flow and volume data for the design criteria.
  - Relies heavily on the concepts contained in the CASQA reference manual and incorporates in Low Impact Development measures.
  - Is organized similar to the Lathrop and Port of Stockton DSPs, which have been approved by the RWQCB, and Ripon's DSP, which is pending submittal to the RWQCB.

# *How does Lodi's plan **differ** with other local plans ?*

- Lodi's Plan *differ*s with some of the other local plans in that it:
  - Does not limit the developer to a set list of treatment controls.
  - Allows other criteria beyond flow and volume based, such as performance based.
  - Does not embody the CASQA information, but cross-references it.
  - Has some aspects of the DSP that apply to all new construction.
  - Attempts to meet the State's MEP standard by incorporating in various levels of BMPs (Mandatory Minimum, Regional, Priority Category BMPs, and Treatment Control Measures.)



# DSP

## Development Standards Plan



***Development standards*** for storm water are design features that are built into the proposed project that either:

- 1) Prevent pollutants associated with that new development from coming into contact with storm water, or
- 2) Treat storm water and remove pollutants from the discharge.

# DSP

## Development Standards Plan

### ***Examples of these include:***

(Examples are from the California Stormwater Quality Association BMP Handbook for New Development)

- Vegetated buffer strips
- Vegetated swales
- Extended detention basins
- Wet ponds
- Constructed wetlands
- Infiltration trenches
- Media filter
- Retention / irrigation
- Alternative and proprietary control measures, including wet vaults, oil/water separators, and vortex separators



**Vegetated Swale**  
**Vegetated Buffer**

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#### **Design Considerations**

- Tributary Area
- Slope
- Water Availability
- Aesthetics

# *So, to whom do these design standards apply?*

## **New Projects** - defined by the State as Priority Development Project Categories:

- Home subdivisions with 10 housing units or more
- Commercial developments ( $\geq 100,000$  sq.ft.)
- Automotive repair shops
- Restaurants
- Parking lots exposed to rainfall  $>5,000$  sq. ft. or with  $\geq 25$  parking spaces.
- Retail Gasoline Outlets

# *So, to whom do these design standards apply?*

## **Applicable**

### **Significant Redevelopment Projects:**

“**Significant Redevelopment**” is defined as the creation or addition of at least 5,000 sq. ft. of impervious surfaces on an already developed site. It includes, but is not limited to, expansion of a building footprint, replacement of a structure, replacement of an impervious surface, and land disturbing activities related to structural or impervious surfaces.

*So, to whom do these design standards apply?*

**But, some aspects will apply to all  
NEW projects:**

- Storm drain labeling
- Trash and garbage enclosures
- How roof drains are plumbed
- Loading docks
- Vehicle and equipment maintenance and washing areas
- Swimming pool and fountain filters
- Sample boxes

*So, to whom do these design standards apply?*

But, they do not apply to  
*existing properties* unless  
that property has  
“significant redevelopment”.



# BMPs

## Best Management Practices

BMPs in the context of Lodi's storm water Development Standards Plan are the design measures that are included in a project to prevent storm water from being contaminated or to treat contaminated water. They vary in complexity from:

Simple signage



To Complex  
Filtration  
systems



[Additional Detail](#)

# BMPs

## Best Management Practices

The City of Lodi has chosen to use the *California Stormwater Quality Association (CASQA) Handbooks* as a reference for the BMPs.

[www.cabmphandbooks.com/](http://www.cabmphandbooks.com/)



**Stormwater Best Management Practice (BMP) Handbooks**

The California Stormwater Best Management Practice Handbooks have provided excellent guidance to the stormwater community since their publication by the Stormwater Quality Task Force (SWQTF) in 1993. The SWQTF became the California Stormwater Quality Association (CASQA) in 2002 and in 2003 CASQA published an updated and expanded set of four BMP Handbooks. These Handbooks reflect the current practices, standards, and significant amount of knowledge gained since the early 90s about the effectiveness of BMPs. For additional information, please visit the [CASQA](http://www.casqa.org) website.

Click on the links below to view and download the individual handbooks.

[This website has been updated for access to the 2004 Errata of the Handbooks.](#)

The California Stormwater Quality Association (CASQA) is an independent advisory group. The statements, views, and contents of this site do not necessarily reflect those of the State Water Resources Control Board or the Regional Water Quality Control Boards.

- New Development and Redevelopment**  

- Construction**  

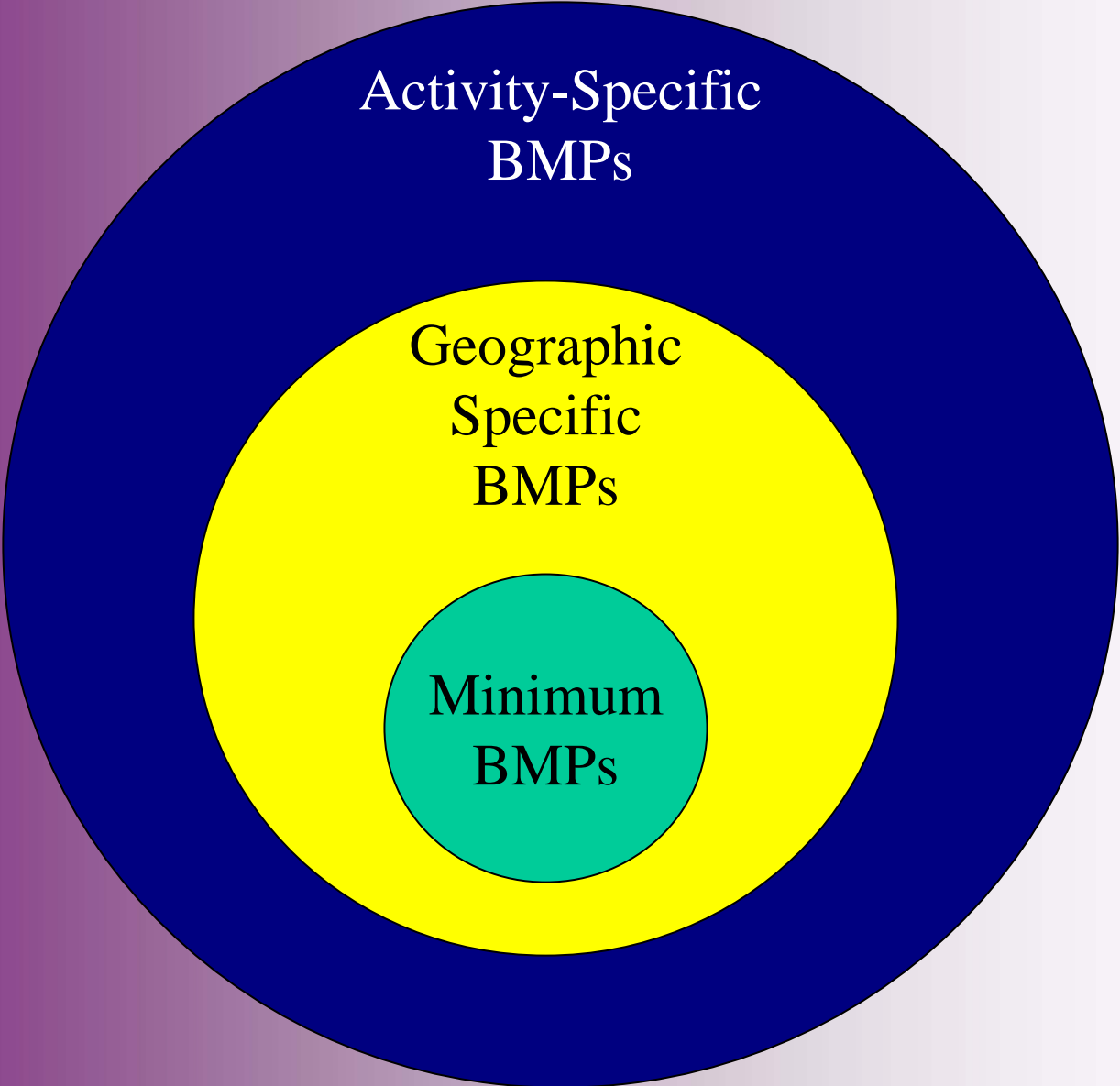
- Industrial and Commercial**  

- Municipal**  


Purchase BMP Handbooks by mailing a completed [Order Form](#) with payment by check  
OR  
Click this link to purchase by [Credit Card](#)

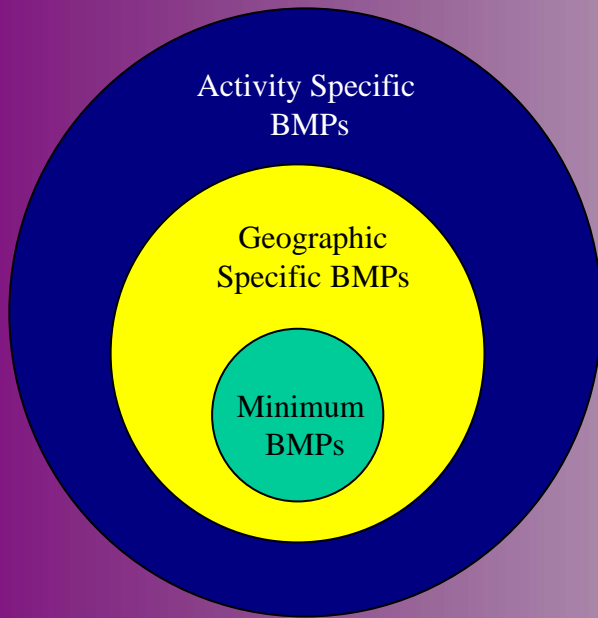
California Stormwater Quality Association

# Lodi's BMP Requirements:



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## BMP Requirements:



### *Minimum BMPs:*

- Are required for all parties subject to the DSP
- Are basic pollution prevention or simple control practices that are universally applicable

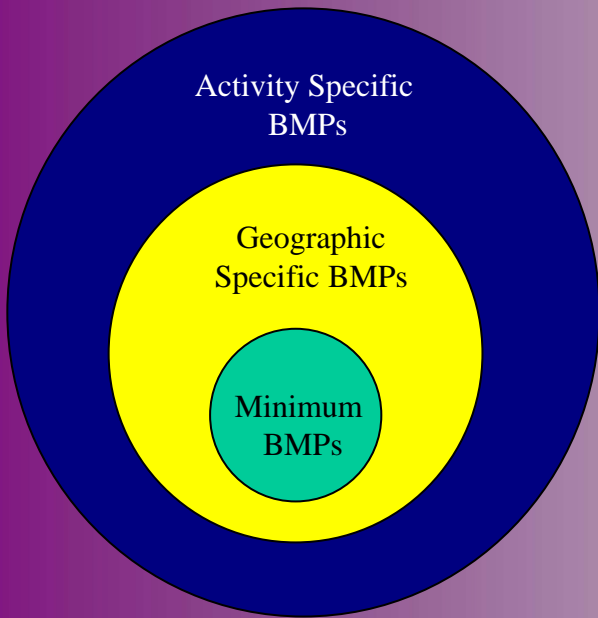
### *Geographic-Specific BMPs:*

- Are minimum BMPs based on the location of the facility and the sensitivities of that location
- Areas that drain straight to the Mokelumne River require more controls than those that flow to a drainage basin.

### *Activity-Specific BMPs:*

- Are treatment control BMPs required for all applicable developments
- State of California has identified types of development requiring treatment controls

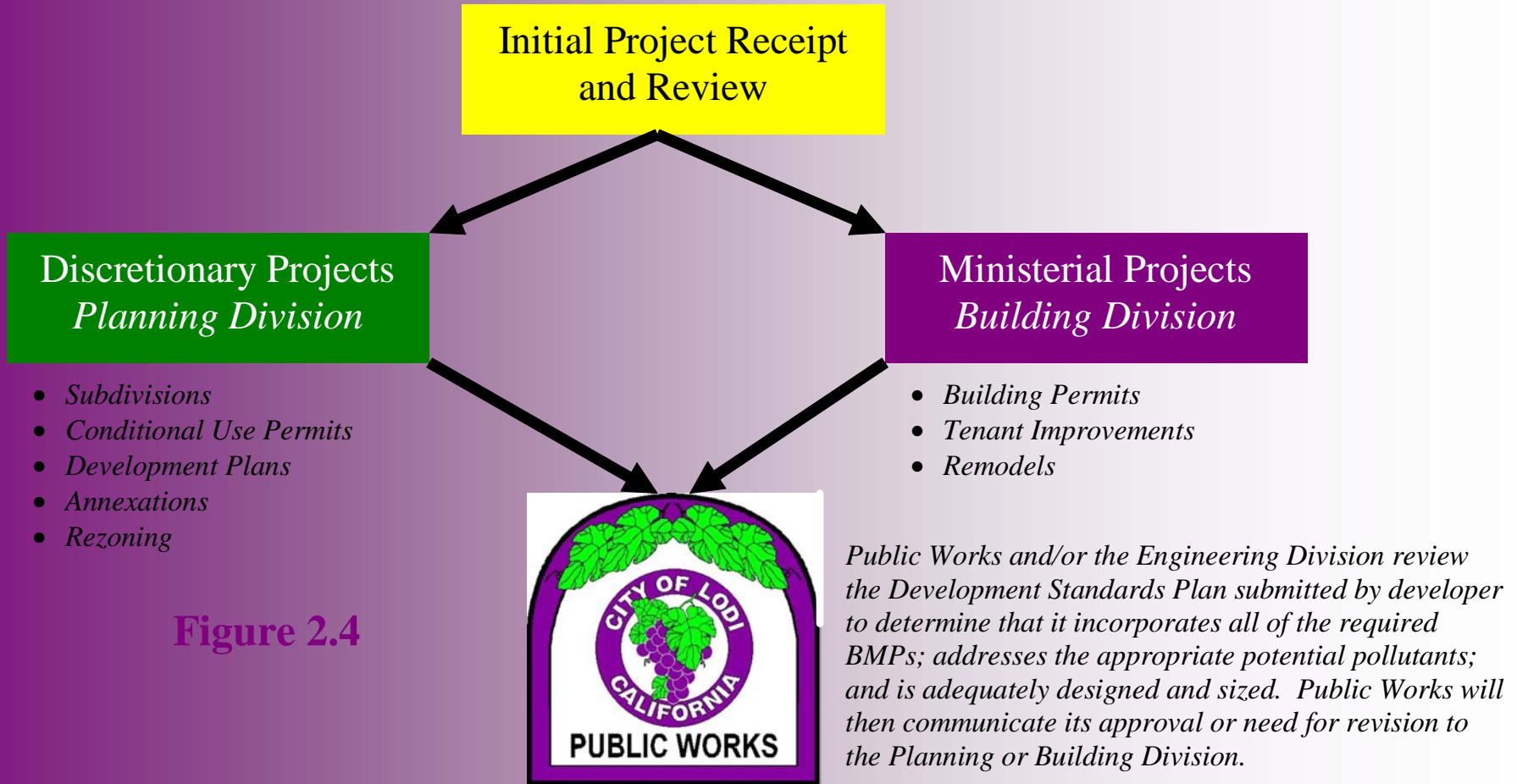
# Example of BMPs:



# Activity-Specific BMPs:

New Development Project Category	Pollutant Category of Concern						
	Sediment	Nutrients	Metals	Trash & Debris	Oxygen Demand	Toxic Organics	Bacteria
Commercial Developments ( $\geq 100,000$ sf)	X	X	X	X	X	X	X
Automotive Repair Shops	X		X	X	X	X	
Retail Gasoline Outlets	X		X	X	X	X	
Restaurants		X		X	X	X	X
Parking Lots ( $\geq 5,000$ sf or 25 spaces)	X		X	X	X	X	
Home Subdivisions ( $\geq 10$ units)	X	X	X	X	X	X	X

# Implementation Process:



**Figure 2.4**

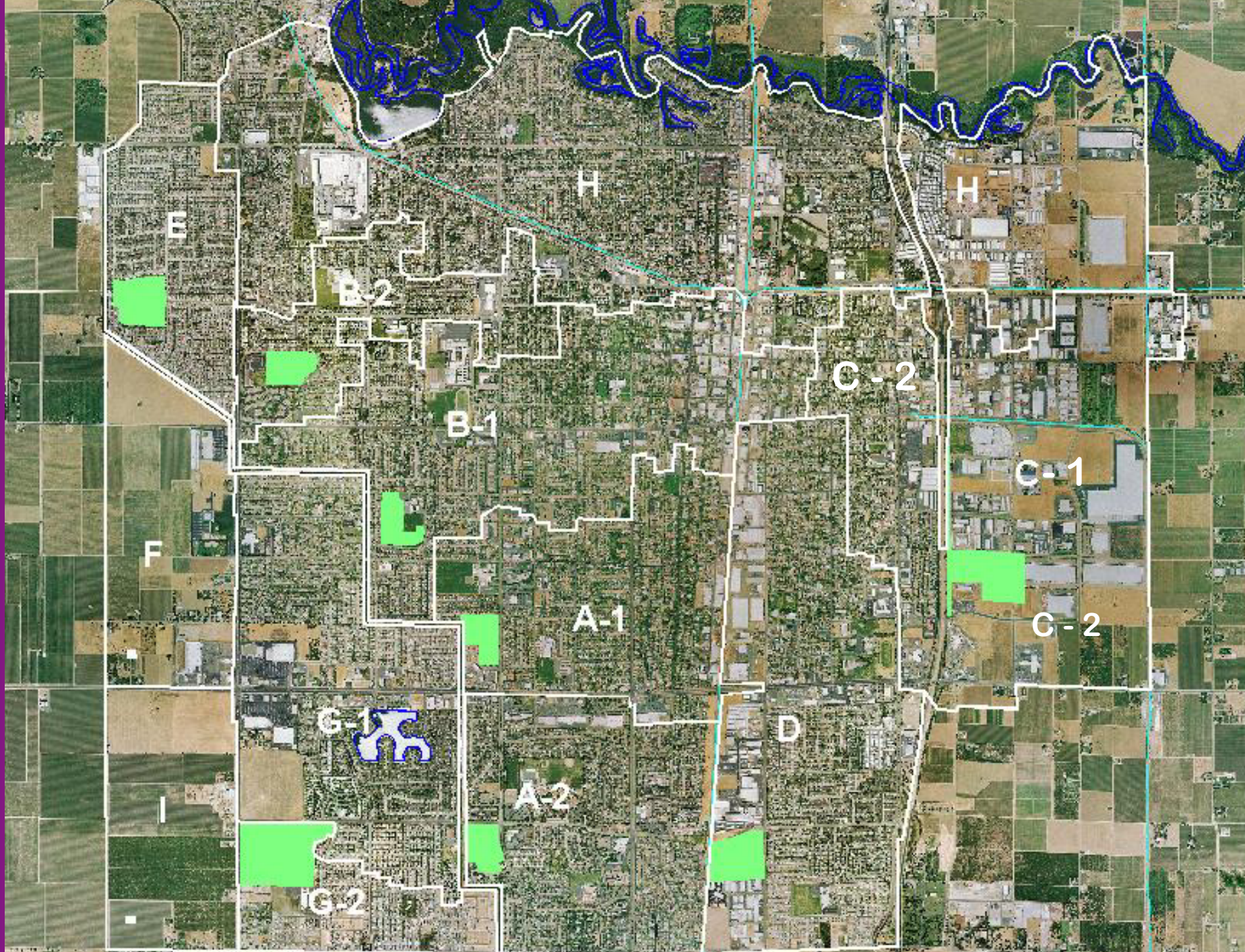


## *Summary of the City of Lodi's Development Standards Plan*

- **Initiated** by the developer during the design phase or as a result of mitigation measures identified during the CEQA review.
- **Implemented** during City of Lodi's Plan Check Process.
- **Identifies** minimum, drainage zone specific, and activity specific best management practices (BMPs).
- **Incorporates** the California Stormwater Quality Association (CASQA) approved design standards and mitigation measures identified during the CEQA review.
- **Involves** Lodi Public Works and Community Development Departments.
- **Integrates** Lodi's overall Storm Water Management Plan.









Basin/Park	Tributary Area (acres)	Site Land Area (acres)	Detention Capacity (ac.ft.)	How low and nuisance flows are handled.
A-1, Kofu	491	12 <sup>1</sup>	41.5	Pumped to the WID
A-2, Beckman	564	16.2 <sup>2</sup>	60.0	Pumped to the WID
B-1, Vinewood	964	16.0	41.5	Pumped to the WID
B-2, Glaves <sup>3</sup>	450	13.2	31.1	Pumped/flows to Mokelumne R.
C -1	Approx. 591			Pumped/flows to the Mokelumne R.
C-2, Pixley <sup>4</sup>	Approx. 500	27.3	128.7	Pumped/flows to Pixley
D, Salas	790	21.0	94.0	Pumped to the WID
E, Peterson	340	20.9	61.0	Pumped/flows to the Mokelumne R.
F ( <i>at Kettleman</i> )	369	30.0	68.5	Pumped/flows to DeBenedetti
F ( <i>near Tokay</i> )		30.0	68.5	Pumped/flows to DeBenedetti
G ( <i>DeBenedetti</i> )	866	46.3	202.0	Detains its own flows
H (Discharge to River)	428			Pumped/flows to the Mokelumne R.
I ( <i>Undeveloped</i> )	320	25.0		Pumped/flows to DeBenedetti
<b>Total:</b>	<b>6,673</b>	<b>227.9</b>	<b>728.3</b>	