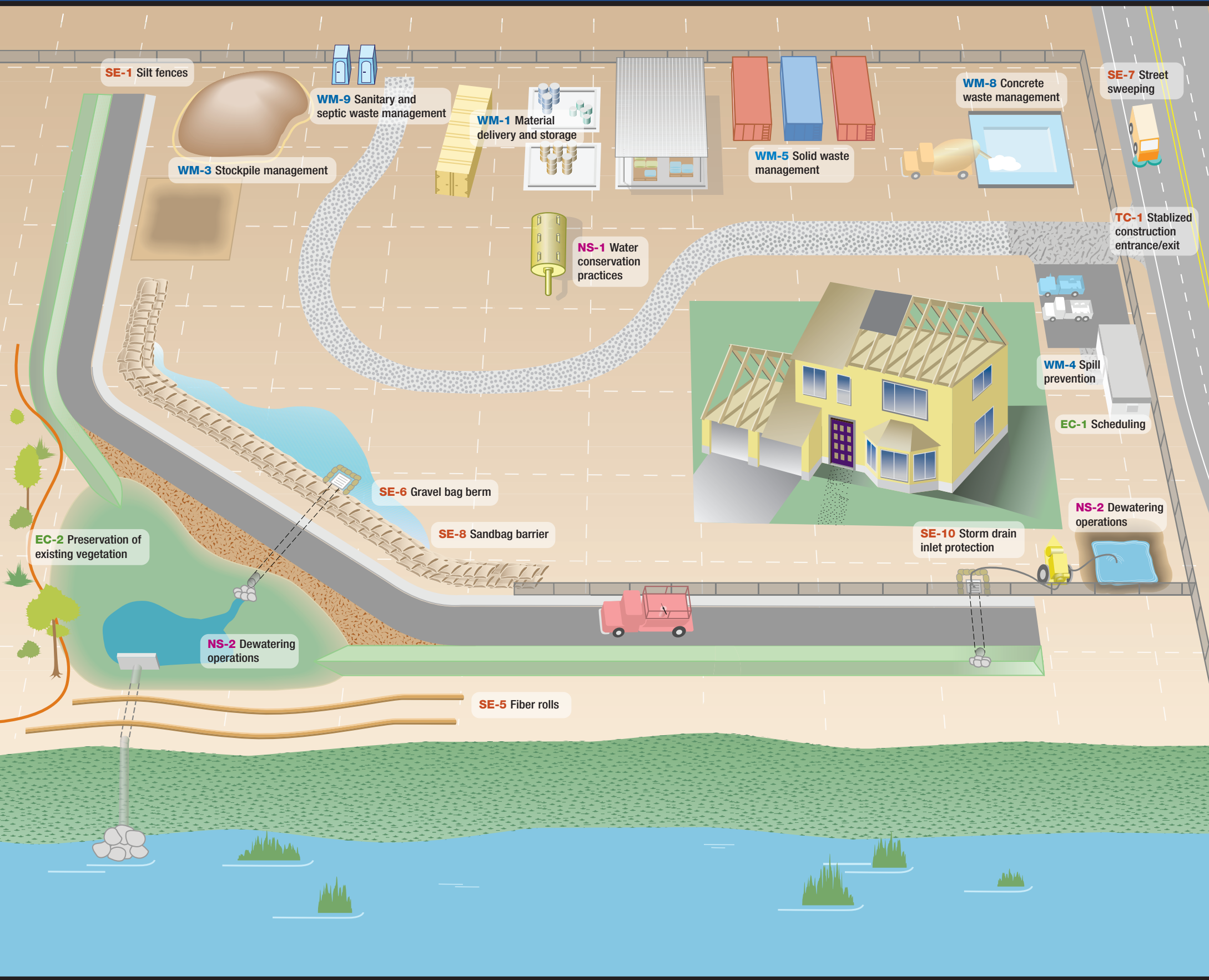


Stormwater Program Best Management Practices for all Construction Sites



Stormwater runoff in the City drains directly into local streams, creeks, and rivers to the Delta. Implementing Best Management Practices (BMPs) to keep construction site runoff clean is an important part of the City's program. This flyer describes BMPs that must be implemented at all construction projects within the City. Additional BMPs may be necessary if a discharge of any material other than clean stormwater leaves the site. Projects subject to the State Construction General Stormwater permit must additionally implement the BMPs required by that permit.

Note that the BMP references used herein (e.g., EC-1, NS-1) are from the CASQA Construction Stormwater BMP Handbook (www.casqa.org).

Erosion Control

- EC-1** Scheduling
- EC-2** Preservation of existing vegetation

Sediment Control

- SE-1** Silt fences
- SE-5** Fiber rolls
- SE-6** Gravel bags
- SE-7** Street sweeping
- SE-8** Sandbag barrier
- SE-10** Storm drain inlet protection
- TC-1** Stabilized construction entrance/exit

Non-Stormwater Management

- NS-1** Water conservation practices
- NS-2** Dewatering operations

Waste Management

- WM-1** Material delivery and storage
- WM-3** Stockpile management
- WM-4** Spill prevention
- WM-5** Solid waste management
- WM-8** Concrete waste management
- WM-9** Sanitary and septic waste management

BMPs as defined by the EPA describe a type of water pollution control. Stormwater BMPs are techniques, measures, or structural controls used to manage the quantity and improve the quality of stormwater runoff. The goal is to reduce or eliminate the contaminants collected by stormwater before it moves into streams, creeks, and rivers into the Delta. Construction sites inherently have various pollutants of concern, such as sediment, that can damage and impair our local waterways.

City of Stockton Municipal Utilities Department Stormwater Program
2500 Navy Dr., Stockton, CA 95206; (209) 937-8791; www.stocktongov.com

Stormwater Program Best Management Practices for all Construction Sites

BMPs for all Construction Sites Definitions

Erosion Control

EC-1 Scheduling is the development of a written plan that includes sequencing of activities and BMPs taking local climate (e.g., rainfall, wind) and site topography into consideration. A primary objective of effective scheduling is to reduce the area and duration of soil exposed to erosion.

EC-2 Preservation of existing vegetation identifies and protects desirable existing vegetation to provide erosion and sediment control benefits.

Sediment Control

SE-1 Silt fences are woven geotextiles that are trenched, attached to support stakes, and sometimes backed by a strengthening mesh. A silt fence ponds sediment-laden runoff allowing sediment to settle out behind the fence.

SE-5 Fiber rolls are biodegradable material wrapped by netting. Some fiber rolls are weighted with gravel cores. Fiber rolls are typically installed along contours in a trench and staked into place. Fiber rolls perform a variety of erosion control and sediment control functions including slowing flow, reducing slope length, ponding runoff, and releasing the runoff as sheet flow.

SE-6 Gravel bag berms consist of a series of gravel-filled bags placed on a level contour to intercept sheet flows. Gravel bags pond runoff, allowing sediment to settle out, and slowly release runoff as sheet flow.

SE-7 Street sweeping and vacuuming includes using self-propelled and walk-behind equipment to remove sediment from streets, roads, and paved surfaces. Sweeping and vacuuming are suitable anywhere sediment is tracked from the project site onto public or private paved surfaces and within the project site on paved surfaces.

SE-8 A sandbag barrier is a series of sand-filled bags placed on a level contour to intercept or to divert sheet flows. Sandbag barriers can be used to pond runoff allowing sediment to settle out. Note that sandbags cannot be used near storm drain inlets or in waterways.

SE-10 Storm drain inlet protection consists of a sediment filter or ponding area around or upstream of a storm drain, drop inlet or curb inlet.

TC-1 A stabilized construction entrance/exit is a defined access point that is stabilized to reduce the tracking of mud and dirt onto public roads. The access point can be stabilized with a rumble strip or a layer of appropriately sized rock underlain with a geotextile fabric.

Non-Stormwater Management

NS-1 Water conservation practices use water during the construction in a manner that prevents erosion and the transport of pollutants offsite. BMPs include: limiting water use; repairing water leaks; limiting the contact of water with construction materials; and containing and reusing water or soaking water into the ground.

NS-2 Dewatering operations manage the discharge of pollutants (primarily sediment) when contained stormwater must be removed from the site. These practices employ BMPs that trap sediment or cause it to settle out before discharge. Dewatering may require a separate NPDES permit from the Regional Board.

Waste Management

WM-1 Material delivery and storage practices include: minimizing the storage of materials onsite; storing materials in watertight containers; enclosed areas (e.g., sheds); or installing secondary containment (e.g., double-lined tank); and conducting regular inspections of stored materials.

WM-3 Stockpile management practices prevent air and stormwater pollution from stockpiles (e.g., soil, sand, paving materials, and pressure treated wood) by properly locating stockpiles, using perimeter barriers, and covering stockpiles.

WM-4 Spill prevention reduces the discharge of pollutants from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, and properly disposing of spill materials.

WM-5 Solid waste management prevents the discharge of pollutants by providing appropriate, designated waste collection areas and containers, arranging for regular waste collection, and proper disposal. Note: All solid waste must be contained and covered daily.

WM-8 Concrete waste management is conducting washout in a designated, contained area and properly disposing of wastes. Containment areas need to be lined or otherwise designed not to release liquids onto or into the ground. Workers need be informed about proper washout, and the washout must be regularly inspected.

WM-9 Sanitary and septic waste management is achieved by providing convenient, appropriately placed, well-maintained facilities, and arranging for regular service and disposal.

Special Provisions

Asbestos Removal / Work: Work with asbestos related materials requires special handling and containment practices under Title 8 of California Code of Regulations.

Lead-Based Paint Renovation, Removal and Painting Program Rule: The RRP Rule requires that contractors that work on pre-1978 dwellings and child-occupied facilities be trained and certified to use lead-safe work practices.

Documentation: In order to ensure compliance be sure to document all routine BMP site inspections, BMP maintenance and cleaning activities in a log that must be available at all times on site for review by agency staff.

Minimize Grading: If grading/removal of vegetation exceed that detailed in the Permit, then the Permit must be updated.

Authority

The City's authority to require the implementation of the control measures/BMPs covered herein is derived from federal, state, and local regulations that include:

- **Clean Water Act:** www2.epa.gov/laws-regulations/summary-clean-water-act
- **NPDES Programs:** http://www.waterboards.ca.gov/water_issues/programs/npdes/
- **CA Fish and Wildlife Code:** <http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc>
- **City of Stockton Municipal Code:** <http://qcode.us/codes/stockton/>
- **CalGreen Building Codes:** www.bsc.ca.gov/Home/CALGreen.aspx

Useful Links

For construction site stormwater BMPs:

- **EPA NPDES Storm Water Program:** www.epa.gov/region09/water/npdes/stormwater.html
- **EPA National Menu of Stormwater BMPs:** <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>
- **CASQA Stormwater BMP Handbooks:** www.casqa.org
- **Caltrans Water Pollution Control Manuals:** www.dot.ca.gov/hq/construc/stormwater
- **Stormwater Manager's Resource Center:** www.stormwatercenter.net

Questions or to Report

- **Spills on Construction Sites:** For spills or illicit discharges at a construction site, the superintendent/site owner is required to take immediate action to contain the spill, and stop the flow into the City's storm drain system.
- **Spills in the Community (non-hazardous, non-sewage related):** For spills of any amount that enter the storm drain system (e.g. the gutter, street, storm drain) and/or any surface water, notification must be made as soon as possible after the discharge and within 24 hours to the City's Stormwater hotline at (209) 937-8341.
- **Sewage (known or suspected):** To report a discharge or spill of sewage immediately call the City of Stockton's Wastewater Collection Department at (209) 937-8341, 24 hours a day, 7 days a week.
- **Solid Waste:** For issues related to garbage call the County of San Joaquin County Solid Waste Division at 1-800-449-4840.
- **Hazardous Waste:** To report a spill or other significant discharge of hazardous materials, immediately dial 9-1-1.

For more information contact:

- Call the City of Stockton's Stormwater Program at (209) 937-8791 or visit: www.stocktongov.com
- For inspection related information please call the Stormwater Inspector at (209) 937-8282 or (209) 993-1449

The information provided herein is simply a general overview intended to help guide builders and contractors in meeting stormwater regulatory compliance. It is recommended that prior to starting any construction project that a qualified professional be consulted. If you have suggestions contact us at (209) 937-8791.

Acknowledgements

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