MALIBU REBUILDS
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Best Management Practices (BMPs) for Construction Sites

For more information, visit **MalibuRebuilds.org**

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Introduction

Construction sites can impact water quality if not properly managed. To protect our environment, **Best Management Practices (BMPs)** are used to reduce pollution and keep soil and debris from washing into storm drains, creeks, and the Pacific Ocean.

What Are BMPs?

BMPs are practical steps taken during construction to:

- Keep the site clean and organized,
- Prevent erosion and control sediment,
- Manage water that isn't from rain (like from washing equipment), and
- Handle waste and materials responsibly.

Key BMPs for Erosion and Sediment Control

Erosion happens when soil is worn away by wind or water. Sediment is the soil that gets carried off-site, often ending up in storm drains or waterways. To prevent this:

- **Preserve existing vegetation** whenever possible.
- Use **temporary seeding, mulching, or ground covers** like hydraulic mulch or geotextiles to protect bare soil.
- Install **perimeter controls** such as:
    - Silt fences
    - Straw wattles
    - Burlap sandbag barriers

These help trap sediment and keep it from leaving the site.

Managing Non-Stormwater

Water from activities like equipment washing or concrete work must be kept from entering storm drains. BMPs include:

- Using designated washout areas
- Preventing unauthorized discharges
- Keeping water from leaving the site untreated

Waste and Material Handling

Construction generates waste that must be managed carefully:

- Clean up debris daily
- Use spill kits and have a spill prevention plan
- Store materials properly to prevent leaks or runoff

Seasonal Considerations

BMPs are important year-round, but especially during the **rainy season (October 1 – April 15)**. Stormwater can quickly carry loose soil and pollutants into storm drains.

Contractors and site managers should:

- Keep soil piles covered or surrounded by berms
- Store excavated soil away from streets, drains, and neighboring properties
- Ensure all BMPs meet **state and federal water quality regulations**

For more information, reach out to **econsultant@malibucity.org**.

Site Management

Best Management Practice - Housekeeping



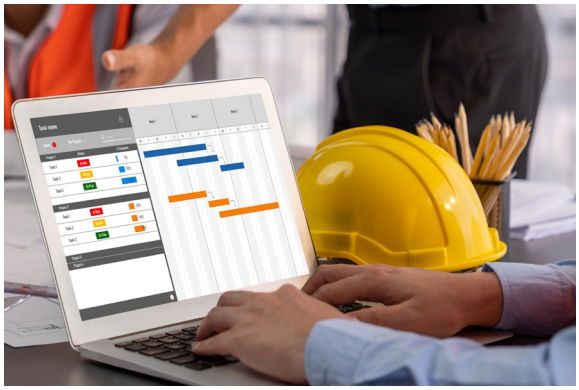
Housekeeping refers to the plans, procedures, and activities designed to minimize or prevent pollution in stormwater runoff. Good housekeeping practices include:

- Storing materials under cover whenever possible,
- Handling materials in ways that reduce the risk of spills or leaks, and
- Properly managing and disposing of waste.

These measures help protect water quality and ensure compliance with environmental regulations.

Erosion Control

Scheduling



Scheduling involves developing a written plan that outlines the sequence of construction activities and associated best management practices (BMPs), while taking local climate conditions—such as rainfall and wind—into account. Effective scheduling helps reduce the area and duration that soil remains exposed and vulnerable to erosion.



Preservation of Existing Vegetation

The most effective way to prevent erosion is to minimize disturbing the land. Preserving existing vegetation helps achieve this by identifying and protecting desirable plant cover and existing trees, which provide natural erosion and sediment control benefits.

Ground Cover - Hydraulic Mulch

Hydraulic mulch is a mixture of fibrous materials and water, blended into a slurry and sprayed onto the surface of soil. It provides temporary protection against wind and water erosion.



Ground Cover - Soil Binders

Soil binders are soil-stabilizing chemicals—such as polymers—applied to exposed soil surfaces to provide temporary erosion control. They are available in liquid or powder form and are either sprayed onto or mixed into the soil.





Ground Cover - Geotextiles and Mats

Geotextiles and mats, also known as rolled erosion control products (RECPs), are made from natural, synthetic, or blended materials. They are applied to the soil surface to create an erosion-resistant layer. When used in combination with seeding, RECPs help retain moisture, improving conditions for seed germination.

Sediment Control

Silt Fence

Silt fences are woven geotextile barriers that are trenched into the ground, secured to support stakes, and sometimes backed by a strengthening mesh. They function by ponding sediment-laden runoff, allowing sediment to settle out behind the fence before the water continues downstream.







Non-Plastic*/Burlap Fiber Rolls or Straw Wattles

Fiber rolls (also known as straw wattles) are tubes of straw, coconut fiber, or other biodegradable materials, wrapped by netting. Some fiber rolls are weighted with gravel cores for added stability. They are typically installed along contours in a trench and staked into place. Fiber rolls serve multiple sediment control functions, including:

- Slowing runoff velocity,
- Reducing slope length,
- Ponding runoff to allow sediment to settle, and
- Releasing runoff as sheet flow.

Burlap fabric or other non-plastic materials should be used. *Effective June 8, 2017, plastic sandbags are banned in Malibu.

Non-Plastic*/Burlap Gravel Bag Berm

Gravel bag berms are formed by placing a series of gravel-filled bags along a level contour to intercept sheet flow. These berms pond runoff, allowing sediment to settle out, and then gradually release the water as sheet flow. Bags used for gravel should be burlap/non-plastic.

*Effective June 8, 2017, plastic sandbags are banned in Malibu.

Non-Plastic*/Burlap Sandbag Barrier

Sandbag barriers are formed by placing a series of sand-filled bags along a level contour to intercept or divert sheet flow. They can be used to pond runoff, allowing sediment to settle out before the water is slowly released. Bags used for sand should be burlap/non-plastic.





Stabilized Construction Entrance/Exit

A stabilized construction entrance/exit is a designated access point that has been reinforced to minimize the tracking of mud and dirt onto public roads. Stabilization can be achieved using a rumble strip or a layer of appropriately sized rock placed over a geotextile fabric.

Wind Erosion Control

Wind erosion and dust control measures include applying water or chemical dust suppressants to disturbed soils, or covering stockpiles and small areas with rolled erosion control products (RECPs) or mulch to prevent dust generation during windy conditions.

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Non-Stormwater Management

Water Conservation Practices



Water conservation practices involve using water in ways that prevent erosion and reduce the transport of pollutants offsite. Key practices include:

- Limiting water use,
- Repairing leaks promptly,
- Preventing water from contacting construction materials, and
- Containing and reusing water whenever possible.

Effective June 2015, the City modified its existing restrictions for outdoor water use, for more information refer to Malibu Municipal Code Chapter 9.20 (**https://ecode360.com/MA5043**) and For Landscape Water Conservation Requirements, contact the City's Planning Department (**https://www.malibucity.org/1034/Biology-Landscaping**)



Dewatering Operations

Dewatering operations involve removing non-stormwater from a site to allow construction activities to proceed or to support vector control. These operations must be managed to prevent the discharge of pollutants. Best Management Practices (BMPs) for sediment control - such as filtration or settling - are used to trap or remove sediment before discharge to land or surface waters. Dewatering activities must comply with all applicable local, regional, and state regulations, permits, or authorizations. For more information, contact **econsultant@malibucity.org**.

Discharges of **groundwater** from construction and project dewatering activities to surface waters within the North Santa Monica Bay Coastal Watershed, including the City of Malibu, are regulated under the **General NPDES Dewatering Permit No. CAG994004, Order No. R4-2023-0429**, or as amended. For details, contact **econsultant@malibucity.org**.

Low-volume discharges to land with minimal pollutant concentrations are considered a low threat to water quality and are subject to **General Waste Discharge Requirements (WDRs) Order No. 2003-0003-DWQ**. An example includes small-scale dewatering during excavations. For more information, contact **econsultant@malibucity.org**.

Material and Waste Management

Material Delivery and Storage

Material delivery and storage practices include:

- Minimizing the amount of material stored onsite,
- Storing materials in watertight containers or enclosed areas (e.g., sheds),
- Installing secondary containment (e.g., double-lined tanks), and
- Conducting regular inspections of stored materials.





Material Use

Material use is a procedural Best Management Practice (BMP) designed to control the quantity and handling of materials, chemicals, and hazardous substances stored onsite. This BMP helps minimize the potential for these substances to come into contact with stormwater run-on or runoff, particularly through non-stormwater discharges.

Stockpile Management

Stockpile management practices help prevent air and stormwater pollution from materials such as soil, sand, paving materials, and pressure-treated wood. These practices include properly placing stockpiles, using perimeter barriers, and covering stockpiles to minimize pollutant discharge.

Spill Prevention and Control

Spill prevention and control procedures are designed to prevent or reduce the discharge of pollutants from leaks and spills. These procedures focus on minimizing the potential for spills, stopping spills at the source, containing and cleaning up spills promptly, and properly disposing of all spill-related materials.





Solid Waste Management

Solid waste management helps prevent or reduce the discharge of pollutants by:

- Providing designated waste collection areas and containers,
- Arranging for regular waste collection, and
- Ensuring proper disposal of waste materials.

Hazardous Waste Management (if present)

Hazardous waste management involves the proper use, control, containment, and disposal of hazardous materials and waste. This Best Management Practice (BMP) is implemented in conjunction with OSHA Hazardous Waste and Materials Standards.



Contaminated Soil Management (if present)

Contaminated soil management involves identifying and controlling soils that are contaminated - or suspected of being contaminated - due to spills, illicit discharges, aerial deposition, or past land use. All contaminated soils must be managed in accordance with applicable federal, state, and local laws and regulations.



Concrete Waste Management

Concrete waste management addresses both hardened concrete waste and concrete slurry waste. Concrete washouts must be conducted in a designated, contained area, with proper disposal of all waste materials. Workers should be trained on correct washout procedures, and the washout area must be inspected regularly to ensure compliance and effectiveness.

Sanitary/Septic Waste Management

Sanitary and septic waste management is achieved by providing convenient, appropriately placed, and well-maintained facilities, along with arranging for regular servicing and proper disposal. Preferred placement for sanitation facilities is on a flat surface and away from, or upstream of, City storm drain inlets. Temporary sanitation facilities should also be equipped with secondary containment to prevent leaks or spills.





Liquid Waste Management (if present)

Liquid waste management involves the containment and proper handling of non-hazardous liquids. Disposal of liquid waste must comply with local and state laws and regulations. For more information contact City of Malibu staff at econsultant@malibucity.org.

Additional BMP Resources

U.S. Environmental Protection Agency's National Menu of Best Management Practices (BMPs) for Stormwater-Construction

www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-construction

California Department of Transportation's Construction Site best management Practices (BMPs) Manual

www.dot.ca.gov/-/media/dot-media/programs/construction/documents/environmental-compliance/construction-site-bmps_final-march-2024_a11y.pdf

California Stormwater Quality Association's 2025 Construction BMP Handbook (subscription required)

www.casqa.org/resources/bmp-handbooks/construction-bmp

For More Information

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310-456-2489 ext. 390
MBuilding@MalibuCity.org

This guide provides general information only. For site-specific guidance, please consult with a California Licensed Professional Engineer (PE), California Licensed Registered Geologist (RG), Qualified Stormwater Pollution Prevention Plan Developer (QSD), or Qualified Stormwater Pollution Plan Practitioner (QSP).