# **Boat Maintenance and Cleaning**

Any debris that is on the ground and light enough to be swept away by flowing rainwater or snowmelt can end up in lakes and reservoirs. Oils, grease, solvents, paint drippings, and fuel spilled or dripped onto the ground can also be carried away in the runoff. Unless the runoff is controlled or treated in some manner, all of these pollutants end up in the lake, where they create unsightly surface films or float until they adhere to surfaces like boat hulls or docks. Some of these pollutants flow dissolved in runoff or attached to soil carried by the runoff. When they reach the water, they sink with the soil to the bottom, are eaten by bottom-feeding fish or by filter-feeding shellfish, or settle onto the leaves of aquatic vegetation and clog their pores. Storm water that is treated in some way to remove these pollutants before they can reach the water does not result in these problems.

Use of solvents, paints and varnishes for in-slip boat maintenance can contribute to pollution entering the water. The best way to protect the water is to perform only small maintenance jobs in the slip. Use of a variety of boat cleaners, such as detergents, teak cleaners and fiberglass polishers can also contribute to pollution and nutrients entering the water and should be discouraged and minimized.

Marinas that perform boat maintenance should have a designated maintenance area that is enclosed in order to prevent debris or oil from going back into the water.

Display signs in designated work areas with rules to prevent wash off of contaminants into the water, including the requirement to clean up any debris on a daily basis.

Boats can carry invasive species on the hull, in bilges and bait tanks. Aquatic species such as, Zebra Mussels can harm native species, damage structures and shorelines, clog water lines and are very hard to control. We encourage marinas to educate their staff to the crucial role in preventing and detecting aquatic invasive species. They also need to educate boaters on why it is important through the use of simple steps to avoid spreading these aquatic invaders. The key messages are: Inspect, Remove, Dispose and Report any Invasive Species.

# Mandatory

Enforce marina rules & regulations regarding boat maintenance & cleaning.

- Have clearly defined rules and regulations on boat maintenance and cleaning available for staff and slip owners. Slip owners should be given a copy when slip is rented.
- Click for Example Rules and Regulations on Boat Maintenance.

Require independent service providers to sign an agreement stating they will comply with environmentally sound practices at the facility.

- Boater should notify hull cleaner as to what type of bottom paint was used and when the bottom was last painted.
- Resource: Click for Example Agreement to Provide Environmentally Friendly Practices.

## Require significant maintenance & cleaning activities to done off water.

- Post signage to notify boat owners of designated work areas (if available).
- Areas where abrasive work will be performed should be protected from wind and enclosed if possible.

#### Prohibit spray painting on the water.

- Spray painting should only be done in designated, enclosed work areas.
- The inside of a building provides the most protected space, but if a large enough interior space is not available, a suitably sized area can be protected with tarps or temporary plastic buildings can be used. Tarps help prevent residue from drifting to non-work areas of the marina and into surface waters.

### Collect all maintenance debris, paint chips, fiberglass, trash etc. daily and dispose of properly.

- Cleaning maintenance areas immediately after maintenance or repair work is done removes trash, visible paint chips, and other debris before they can be blown or washed into the marina basin. Spent sandblasting grit, boat repair debris, and solid waste should be stored under cover and in a manner that minimizes contact with process or storm water.
- Vacuuming or sweeping is an excellent method of collecting these wastes, especially over paved surfaces. Hosing a maintenance area for cleanup can result in the same pollution that storm water would cause.
- Hazardous materials should be disposed of properly according to the MSDS sheet.

#### Additional

### Maintenance area has an impervious surface covering the ground. (Cement, tarp, etc.)

• This allows for much easier daily clean up and collection, which prevents debris from being washed into the water.

### Maintenance area is covered with a roof.

This keeps rain from washing materials out of the designated area and into the water.

#### Surround the maintenance area with a berm or retaining wall.

• This reduces pollution in runoff from entering the water.

### Conduct all spray painting in an enclosed area.

• This can be a building or in an area surrounded by tarps, away from the water.

## Prohibit uncontained pressure cleaning.

• Pressure cleaning should only be performed in a designated area where the debris can be collected and disposed of properly. Most vessel bottom paints contain copper, which is toxic to aquatic life. Care should be taken not to allow runoff from boat cleaning to enter the water.

### **Provide Boater and Staff Education for:**

### Doing only minor maintenance in slips

 Tackle boat projects in the water only if they involve less than 25% of the surface above water line.

# Environmentally safe cleaning and painting

- Drape vessel with tarps to catch wastes from small projects.
- Cover the water between boat and dock with tarps for small projects done on the water.
- Never sand your boat in the water.
- Plug scuppers to contain dust and debris.
- Ventilate your space to prevent the accumulation of flammable or noxious fumes
- Mix all solvents, paints and varnishes over a tarp or on land.
- Avoid cleaners that contain ammonia, lye, sodium hypochlorite, chlorine or petroleum distillates.
- Carefully read labels to ensure the products are phosphate free and non toxic. Use products in moderation, since more of the cleaner product does not automatically mean your topside is cleaner.
- Do not sand in a heavy breeze.
- Do not sand with steel wool.

## Spill avoidance

- Remove oil, debris and clutter from your immediate work area.
- Keep oil absorbents handy.
- Keep all open containers of liquids (e.g. paints, solvents, fuel) that could spill to the water, scuppers or storm drains in secondary containment. Unattended open containers of these types of liquids should be prohibited.

### Regularly scheduled maintenance using BMP's

• Keep engines well tuned. Routinely check for engine fuel leaks, and use a drip pan under engines.

# **Invasive Species management**

- Boats can carry invasive species on the hull, in bilges and bait tanks. Aquatic species such as,
  <u>Zebra Mussels</u> can harm native aquatic life, damage structures and shorelines, clog water lines
  and are very hard to control. We encourage marinas to educate their staff to the crucial role in
  preventing and detecting aquatic invasive species. They also need to educate boaters on why it is
  important through the use of simple steps to avoid spreading these aquatic invaders. They key
  messages are; Inspect, Remove, Dispose and Report any Invasive Species.
- To prevent the spread of <u>Zebra Mussels</u>, download and provide copies of the Zebra Mussels Invasive Species Fact Sheet for boaters to your staff and tenants.
- Resource: To learn more about Invasive Species, click HERE