



Navy Environmental Quality Fact Sheet



Do you want to improve water reuse and conservation at your facility?

Would you like to improve this process in the following areas?

- **Meet environmental compliance regulations.** Reduce potable water consumption and wastewater disposal. Improve energy efficiency. Media areas are water and wastewater.
- **Improve workers' safety and health.** No change from current operations.
- **Increase productivity.** No change from current operations.
- **Save money.** Reduce water and energy utility costs.



Recycled Water Use at Marine Corps Base Camp Pendleton

*Water conservation projects save money, project a positive image, and help preserve the environment. Recycled or reclaimed water can be used to reduce the demand for potable water, reduce wastewater discharges, and increase regulatory compliance. Recycled water is primarily derived from "graywater," or water that is generated by bathroom sinks, showers, and clothes washers. In a graywater recycling system, water that normally would be discharged to a municipal sewage treatment plant is instead collected, treated, and reused. Reclaimed water is water that has received at least advanced secondary treatment and meets state or local water quality requirements. Recycled or reclaimed water can be used for many applications that do not require potable water, including: landscape or golf course irrigation, flushwater for toilets or urinals, supply water for fountains or ornamental ponds, or makeup water for cooling towers or other industrial operations. **Water reuse programs are currently being practiced at NAS Jacksonville FL and NAS Pensacola FL.***

How can you achieve these improvements?

Use recycled or reclaimed water for applications that do not require potable water.

How does this system work?

Water that would normally be discharged to a municipal sewage treatment plant - such as from bathroom sinks, showers, or clothes washers - can be collected, treated to remove suspended solids, pathogens, and sludge, and reused.

How will this system save you money?

Reclaimed water can often be significantly cheaper than potable water. Also, reduced potable water use will reduce water-related utility costs. Reducing water use may defer the construction of new water facilities, such as wells, reservoirs, or treatment plants.

How can this method eliminate or reduce pollution?

Using recycled or reclaimed water can reduce the demand for potable water and conserve water resources. Implementation of this method will result in the following pollution reductions:

- Reduce the volume of potable water use.
- Reduce energy consumption related to water distribution and treatment.

Which processes can benefit most from this method?

Recycled or reclaimed water can be a safe, cost-effective alternative for applications that do not require potable water. Typical applications include:

- Landscape irrigation
- Golf course irrigation
- Industrial operations
- Cooling tower makeup
- Flush water for toilets and urinals
- Supply water for ornamental ponds or fountains

How can this method reduce regulatory compliance concerns?

Using recycled or reclaimed water will allow Navy facilities to reduce potable water use and improve energy efficiency. Implementation will result in the following regulatory compliance benefits:

- Helps facilities meet water conservation and usage reduction requirements of the Energy Policy and Conservation Act and Executive orders 12902 and 13148.



Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by using pollution prevention technologies and methods to reduce compliance requirements. This fact sheet is one in a series designed to encourage activities to use pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

For additional information, contact:

More information on water conservation techniques and water reuse can be found in the *Navy Water Conservation Guide for Shore Facilities, UG-2017-E&U, July 1996* (Web: <http://energy.navy.mil/key-areas/WaterWeb.html>).

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