



2006

WASTEWATER SECURITY FACT SHEET

Who do you call in an emergency?
See back page.

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY, WASTEWATER PROGRAM

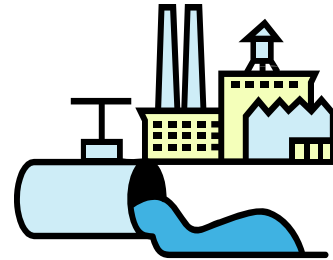
Wastewater Security is Focus of GAO-05-165 Report

In a recent report to the *Senate Committee on Environment and Public Works*, the Government Accountability Office (GAO) presented the results of a survey conducted among fifty wastewater experts nationwide who were asked to answer the following questions:

- Which wastewater assets are most vulnerable to terrorist attacks?
(See below)
- What security enhancing actions are most deserving of federal support?
→ (See page 2)
- What criteria should be used for determining those utilities having the highest priority for federal funding to improve security?
→ (See page 2)

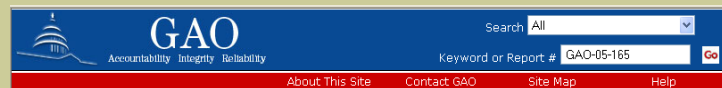
- What is the best method to distribute federal funds?
→ (See page 2)

The results of the survey are presented in the following, starting immediately below and continuing on through page 2.



How can waste water security be enhanced?

To get a copy of GAO-05-165, "Wastewater Facilities: Expert's Views on How Federal Funds Should be Spent to Improve Security," go to <http://www.gao.gov/> and enter GAO-05-165 in the search box. Then click **Go**.

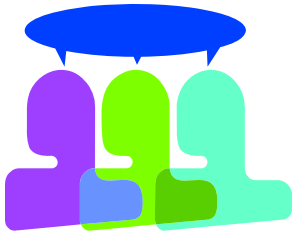


The Five Most Vulnerable Wastewater Assets

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| Fifty experts asked to identify wastewater assets that are the most vulnerable to security threats picked the following: | 1 | Collection system's network of sewers (42 votes) |
| | 2 | Treatment chemicals (32 votes) |
| | 3 | Key components of the treatment plant, such as the headworks (29 votes) |
| | 4 | Supervisory Control and Data Acquisition (SCADA) systems (18) |
| | 5 | Pumping stations (16) |

The Idaho National Laboratory (INL) maintains a SCADA test bed for conducting research aimed at enhancing utility infrastructures, making systems less susceptible to attacks. For more information on the INL test bed, go to:

<http://www.inl.gov/nationalsecurity/capabilities/security/>



How do wastewater experts think security can be enhanced and funded? Source: GAO-05-165.

Security-Enhancing Activities Deserving Federal Support

When asked to pick those security-enhancing activities most deserving of federal support, the survey of experts polled for GAO-05-165 cited the following:

- 1 Replacing gaseous chemicals used in wastewater treatment with less hazardous alternatives (29 votes)
- 2 Improving local, state, and regional collaboration efforts (23 votes)
- 3 Completing vulnerability assessments for individual wastewater systems (20 votes)

TWENTY-NINE OF FIFTY EXPERTS SURVEYED RATED THE REPLACEMENT OF GASEOUS CHEMICALS WITH LESS HAZARDOUS ALTERNATIVES TO BE THE HIGHEST PRIORITY FOR FEDERAL FUNDING.

CWSRF Programs: More than \$40 Billion In Low-Interest Loans

EPA's Clean Water State Revolving Fund (CWSRF) program has provided more than 14,000 low-interest loans for "water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management."

"CWSRFs offer:

- Low interest rates, flexible terms
- Significant funding for nonpoint source pollution control and estuary protection
- Assistance to a variety of borrowers
- Partnerships with other funding sources"

For additional information, see the addresses below:

Who Should Get Federal Funds?

When asked which utilities should get top priority for federal funds to enhance the security of wastewater systems, the panel of fifty experts cited the following criteria most frequently:

- 1 Utilities serving critical infrastructure (39 votes)
- 2 Utilities using large quantities of gaseous chemicals (26 votes)
- 3 Utilities serving large populations (24 votes)

How Should Federal Funds be Distributed?

When asked to rate the best mechanisms for distributing federal funds to be used to enhance wastewater security, the fifty experts chose the following:

- 1 Direct grants (34 votes)
- 2 Clean Water State Revolving Fund (5 votes)
- 3 Loans or loan guarantees (1 vote)

<http://www.epa.gov/owmitnet/cwfinance/cwsrf/index.htm>

FOR ADDITIONAL INFORMATION ON CONSTRUCTION LOANS FOR PUBLIC WATER SYSTEMS IN IDAHO, SEE: [HTTP://WWW.DEQ.IDAHO.GOV/WATER/ASSIST_BUSINESS/PWWS/CONSTRUCTION_LOANS.CFM](http://www.deq.idaho.gov/water/assist_business/pwws/construction_loans.cfm)

Access EPA's Water Security Web site at: <http://cfpub.epa.gov/safewater/watersecurity/index.cfm>

EPA Resources

The Environmental Protection Agency's Water Security Web site provides resources of interest to utilities and others involved in ensuring security. Topics addressed on this site include:

- Vulnerability assessments
- Emergency/incident planning
- Security enhancements, research, and technology
- Legislation and directives, including links to Homeland Security Presidential Directives and federal laws
- Resources for small utilities
- Resources for public involvement
- Resources for information sharing

Basic Elements of Vulnerability Assessments:

1. Characterization of the water system, including mission and objectives
2. Identification and prioritization of adverse consequences
3. Determination of critical assets
4. Assessment of the likelihood of malevolent acts
5. Evaluation of existing countermeasures
6. Analysis of current risk and development of a prioritized plan for risk reduction.

For additional information, see the address below:

Vulnerability Assessment Tools

Evaluating your vulnerability is the first step in making your facility more secure. EPA provides links to resources that can help utilities perform security vulnerability assessments.

Among the resources that can be accessed from the EPA site are the following:

- Vulnerability Self-Assessment Tools (VSAT)
- National Environmental Training Center for Small Communities (NETCSC) guide to security for small water systems
- A video on developing vulnerability assessments, prepared especially for small water systems.
- Security Vulnerability Self-Assessment Guide for Very Small (<3,300) Systems
- Risk Assessment Methodology for Water Utilities (RAM-W), developed by Sandia National Laboratory
- Protecting Your Community's Assets: A Guide for Small Wastewater Systems

...for more, see the address below:

EPA Vulnerability Assessment Fact Sheet

http://www.epa.gov/safewater/watersecurity/pubs/va_fact_sheet_12-19.pdf

A Message from the Wastewater Program Manager

In this wastewater fact sheet, the focus is on security, starting with the findings of GAO-05-165 and continuing through some other compelling wastewater security related suggestions and recommendations of merit.

In an era in which terrorism remains a major threat to the security of our country's infrastructure, including wastewater systems, we are sure that you will find this information to be not only thought-provoking, but worthy of your attention.

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http://www.deq.idaho.gov/water/prog_issues/waste_water/overview.cfm



If you suspect contamination of or intrusion into your wastewater system, first call your local law enforcement agency by dialing **911**. Then call the *Idaho Com Center (1-800-632-8000)* to set up an emergency telephone conference with state and local officials, who will advise you on what to do next.

Emergencies: Who to call, when to call, and what to do

If you suspect contamination or intrusion, call your local law enforcement agency (911) and then the Idaho Com Center, 1-800-632-8000!



Who to call

If you suspect contamination of or intrusion into your wastewater system, first call your local law enforcement agency by dialing **911**. Then call the *Idaho Com Center (1-800-632-8000)* to set up an emergency telephone conference with state and local officials, who will advise you on what to do next.

When to call

Conditions under which you should call include the following:

- When physical security has been compromised, or there is obvious evidence of accidental or malicious intrusion.
- When there is evidence of vandalism that suggests intrusion leading to added vulnerability of the system—such as caused by holes in fences or gates, cuts in barbed wire, or the removal or destruction of locksets.
- When suspicious materials (discarded packaging, plastic bags, unlabeled and discarded containers) or evidence of intrusion

(marks where devices have been dragged across the ground or vehicle tracks) have been discovered.

When anonymous threats have been directed at a facility.

What to do

If your concern meets any of the circumstances described, **call your local law enforcement agency (911) and then the Idaho Com Center at 1-800-632-8000.**

Clearly indicate that your call concerns a threat to a wastewater system.



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