



# The EPA's Terminology Services: Toward Better Terminology Management and Use

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U.S. Environmental Protection Agency  
Office of Environmental Information

**Knowledge Organization Systems: Managing to the Future**  
**A Joint CENDI/NKOS Workshop**  
**National Agricultural Library**  
October 22, 2009



## Overview

- How We Got Here
- EPA's Terminology Services
- Current Efforts
- Future Directions

# Terminology Services

- Search & Discovery
- Terminology Management
- Automated Services
- Collaborative Stewardship
- Training and Contract Support

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Slide 3

The screenshot shows the EPA Terminology Services website. At the top, it says "U.S. ENVIRONMENTAL PROTECTION AGENCY" and "TERMINOLOGY SERVICES". There are navigation links for "Logout", "Frequent Questions/Help", and "Link to Data Standards". Below this is a breadcrumb trail: "SOR Home > Terminology Services Home > Overview". A horizontal menu contains "Home", "Search & Retrieve", "Manage Terminology", "Automated Services", "Content Workgroups", "Outreach & Education", "Training", and "Administration". Below the menu is another row of links: "Overview", "Basic Information", "What is Terminology?", "Vision", "Quality", "Roles", and "Best Practices".

**Supporting access and understanding through terminology**

Terminology Services consists of:

- Repository of environmental terms, their relationships, definitions, and relevant metadata (e.g., synonyms) tool for the creation and management of terminology resources\* (e.g., glossaries, taxonomies, thesauri).
- Collaboration tools - to help users develop and manage workflow and approval processes during terminology development

Additionally, terminology services include:

- User friendly interface for customer discovery of EPA terminology
- Automated access (i.e. web services) to import and export terminologies
- Training in terminology development
- Manuals and FAQs to support development and management of terminology
- Ability to publish glossaries for web pages and other uses
- Access to terminology development experts to support terminology development
- "My Glossaries" allows creation of customized glossaries
- Access to EPA's Web Taxonomy

\*Synpactica KMS software has been purchased for these tasks

**Announcements**

- **Exciting System of Registries Conference May 20, 2009.** Please **click on the training tab to register** for the 2009 SOR conference to be held on May 20 in Washington D.C. The theme will be **Bringing Meaning to Data: Terminology and Metadata Services Today**. The conference will showcase the new SOR and data standards Web sites, new registry services, and improved functionality in existing registries. There will be a range of relevant topics for a wide spectrum of people involved in metadata and environmental management including: system developers, data analysts, scientists, policy makers, decision makers, program managers, and IT managers.

Posted 02/19/2009

**Getting Here**

1. [www.epa.gov/sor](http://www.epa.gov/sor)
2. Select Terminology Services

Terminology Services - Windows Internet Explorer provided by EPA

https://iaspub.epa.gov/sor\_extranet/registry/termreg/home/overview/home.do

U.S. ENVIRONMENTAL PROTECTION AGENCY

# TERMINOLOGY SERVICES

Logout  
Frequent Questions/Help  
Link to Data Standards

S&R Home » Terminology Services Home » Overview

Home Search & Retrieve Manage Terminology Automated Services Content Workgroups Outreach & Education Training

**Terms & Acronyms** Glossaries & Keyword Lists Taxonomies Thesauri Help

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Subscribe to Terminology Services

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Posted 02/18/2009

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Page Last Updated: March 26, 2009

https://iaspub.epa.gov/sor\_extranet/registry/termreg/searchandretrieve/termsandacronyms/search.do

Terms & Acronyms - Windows Internet Explorer provided by EPA

https://iaspub.epa.gov/sor\_extranet/registry/termreg/searchandretrieve/termsandacronyms/search.do

U.S. ENVIRONMENTAL PROTECTION AGENCY

# TERMINOLOGY SERVICES

Logout  
Frequent Questions/Help  
Link to Data Standards

S&R Home » Terminology Services Home » Search & Retrieve » Terms & Acronyms

Home Search & Retrieve Manage Terminology Automated Services Content Workgroups Outreach & Education Training

**Terms & Acronyms** Glossaries & Keyword Lists Taxonomies Thesauri Help

## Terms & Acronyms

Users may search on all approved terms and acronyms stored in the terminology tool. Users may select:

- Term to search for
- Where the term might be reflected in the string (begins with, contains, exact match).

Enter Search Criteria:

Search Terms:

Contains  Begins With  Exact Match

Only Return Terms With Definitions

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Page Last Updated: March 26, 2009

iaspub.epa.gov/sor\_extranet/registry/termreg/searchandretrieve/termsandacronyms/search.do

Terminology Services Home Basic Information

Frequent Questions/Help Login for EPA & Partners Link to Data Standards

System Inventory Services Reusable Component Services Data Registry Services Substance Registry Services Facility Registry Services

## Terms & Acronyms - Search Results

The Search Results is an alphabetical list based on the search criteria. The user may click on a vocabulary link to go directly to the vocabulary containing the term. The user has the option to export the results to a variety of file formats.

Terms & Acronyms  
Search Terms (Exact Match): pH; Only Return Terms With Definitions: Yes

7 results found Page 1 of 1 Results per page: 10

<input type="checkbox"/>	Term	Acronym	Code	Vocabulary	Vocabulary Type	Scope Note	Preferred Term
<input type="checkbox"/>	pH			<a href="#">Environmental Issues Glossary</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> The measure of acidity or alkalinity of a chemical solution, from 0-14. Anything neutral, for example, has a pH of 7. Acids have a pH less than 7, <u>bases (alkaline)</u> greater than 7.</p>						
<input type="checkbox"/>	pH			<a href="#">Superfund</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> A measurement of the acidity or alkalinity level of a solution.</p>						
<input type="checkbox"/>	pH			<a href="#">UST Technical Terms</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> A measure of the acidity of a solution. pH is equal to the negative logarithm of the concentration of hydrogen ions in a solution. A pH of 7 is neutral. Values less than 7 are acidic, and values greater than 7 are basic.</p>						
<input type="checkbox"/>	pH			<a href="#">TX NRCC Legal Gov. Guide</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> A measure of the acidity or alkalinity of a material, liquid or solid. pH is represented on a scale of 0 to 14 with 7 representing a neutral state, 0 representing the most acid and 14, the most alkaline.</p>						
<input type="checkbox"/>	pH			<a href="#">Underground Tank Glossary</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> A measure of the acidity of a solution. pH is equal to the negative logarithm of the concentration of hydrogen ions in a solution. A pH of 7 is neutral. Values less than 7 are acidic, and values greater than 7 are basic.</p>						
<input type="checkbox"/>	pH			<a href="#">Terms of Roy</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> An expression of the intensity of the basic or acid condition of a liquid; may range from 0 to 14, where 0 is the most acid and 7 is neutral. <u>Natural waters usually have a pH between 6.5 and 8.5.</u></p>						
<input type="checkbox"/>	pH			<a href="#">Drinking Water Tech &amp; Legal</a>	Glossary and Key Word List		
	<p><b>Definition 1:</b> pH is an expression of the intensity of the basic or acid condition of a liquid. Mathematically, pH is the logarithm (base 10) of the reciprocal of the hydrogen ion concentration, [H+]. <math>pH = \log (1/[H+])</math>. The pH may range from 0 to 14, where 0 is most acid, 14 most basic, and 7 neutral. Natural waters usually have a pH between 6.5 and 8.5.</p>						

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# TERMINOLOGY SERVICES

Logout  
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Home » Terminology Services Home » Overview

Home Search & Retrieve **Manage Terminology** Automated Services Content Workgroups Outreach & Education Training Administration

**My Glossaries** Access Terminology Tool Manuals Terminology Processes Terminology Standards

**Supporting access and understanding through terminology**

Terminology Services consists of:

- A Terminology Repository of environmental terms, their relationships, definitions, and relevant metadata (e.g., synonyms) and a tool for the creation and management of terminology resources\* (e.g., glossaries, taxonomies, thesauri).
- Collaboration tools - services to help the user access, develop terminology and manage workflow and approval processes

Additionally, terminology services include:

- User friendly interface for customer discovery of terminology
- Automated (machine-to-machine) access to import and export terminologies
- Training in best practices in terminology development
- Resources and references to support good terminology management
- Ability to publish glossaries for web pages and other uses
- Access to terminology experts to assist in vocabulary development
- Ability to build customized glossaries from existing terminology (coming soon)

\*Commercial off the shelf software, Synaptica, has been purchased for these tasks

[Subscribe to Terminology Services](#)

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Posted 02/19/2009

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URL: <http://intranet.epa.gov/>

Page Last Updated: May 20, 2008

### My Glossaries - Glossary of Water Related Terms

The Glossary Name and Glossary Description fields are required. Once a glossary has been created, press the "Add Term" button to begin adding terms and acronyms to the glossary. Terms and acronyms can also be added to your glossary from the Terms & Acronyms and Glossaries & Keyword Lists results pages under Search & Retrieve.

**Glossary Metadata**

\* **Glossary Name**

\* **Glossary Description**

Save Glossary Remove Selected Terms Add Term Back to My Glossary List

Terms & Acronyms

43 results found Page 1 of 1 Results per page: All

<input type="checkbox"/>	Term	Acronym	Vocabulary	Term Source	Last Update Date	Out of Date? (Y/N)
<input type="checkbox"/>	brackish water		TX NRCC Local Gov Guide		07/28/2006	No

**Definition 1:** A mixture of fresh and salt water.

**My Term:**

**My Definition:**

**My Term Source / Comment:**

**My Last Modified Date:** 03/26/2009

<input type="checkbox"/>	finished water		Drinking Water Tech & Legal		07/28/2006	No
	<b>Definition 1:</b> Water that has passed through a water treatment plant; all the treatment processes are completed or "finished". This water is ready to be delivered to consumers. Also called product water.					
	<b>My Term:</b>	<input type="text" value="finished water"/>				
	<b>My Definition:</b>	<input type="text" value="1) Water that has passed through a water treatment plant; all the treatment processes are completed or 'finished'. This water is ready to be delivered to consumers. Also called product water."/>				
	<b>My Term Source / Comment:</b>	<input type="text"/>				
	<b>My Last Modified Date:</b>	03/26/2009				
<input type="checkbox"/>	finished water		Safe Drinking Water Glossary		07/28/2006	No
	<b>Definition 1:</b> Water that has been treated and is ready to be delivered to customers.					
	<b>My Term:</b>	<input type="text" value="finished water"/>				
	<b>My Definition:</b>	<input type="text" value="1) Water that has been treated and is ready to be delivered to customers."/>				
	<b>My Term Source / Comment:</b>	<input type="text"/>				
	<b>My Last Modified Date:</b>	03/26/2009				
<input type="checkbox"/>	finished water		Terms of Env		07/28/2006	No
	<b>Definition 1:</b> Water is "finished" when it has passed through all the processes in a water treatment plant and is ready to be delivered to consumers.					
	<b>My Term:</b>	<input type="text" value="finished water"/>				
	<b>My Definition:</b>	<input type="text" value="1) Water is 'finished' when it has passed through all the processes in a water treatment plant and is ready to be delivered to consumers."/>				
	<b>My Term Source / Comment:</b>	<input type="text"/>				
	<b>My Last Modified Date:</b>	03/26/2009				

<input type="checkbox"/>	gray water	<a href="#">Terms of Env</a>	06/12/2008	No
<b>Definition 1:</b> Domestic wastewater composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers.				
<b>My Term:</b> <input type="text" value="gray water"/>				
<b>My Definition:</b> <input type="text" value="1) Domestic wastewater composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers."/>				
<b>My Term Source / Comment:</b> <input type="text"/>				
<b>My Last Modified Date:</b> 03/26/2009				
<input type="checkbox"/>	grey water	<a href="#">Drinking Water Tech &amp; Legal</a>	07/28/2006	No
<b>Definition 1:</b> Wastewater other than sewage, such as sink drainage or washing machine discharge.				
<b>My Term:</b> <input type="text" value="grey water"/>				
<b>My Definition:</b> <input type="text" value="1) Wastewater other than sewage, such as sink drainage or washing machine discharge."/>				
<b>My Term Source / Comment:</b> <input type="text"/>				
<b>My Last Modified Date:</b> 03/26/2009				
<input type="checkbox"/>	ground water	<a href="#">Drinking Water Glossary</a>	07/28/2006	No
<b>Definition 1:</b> The water that systems pump and treat from aquifers (natural reservoirs below the earth's surface).				
<b>My Term:</b> <input type="text" value="ground water"/>				
<b>My Definition:</b> <input type="text" value="1) The water that systems pump and treat from aquifers (natural reservoirs below the earth's surface)."/>				
<b>My Term Source / Comment:</b> <input type="text"/>				
<b>My Last Modified Date:</b> 03/26/2009				

Synaptica® from Dow Jones Taskview: Please Login; User: Mike Pendleton; Permission: SA Version 7.0.1 [Log Out](#) [Help](#)

**Taskviews** Search Tree Browse A-Z Browse Add Reports Tools Admin

Taskview: Please Login; User: Mike Pendleton; Permission: SA

Login to a Taskview from the selection below:

- [Active Vocabularies](#)  
Contains all active vocabularies. It excludes those in the archive, the training, testing and loading vocabularies. Includes the facets of the Web Taxonomy.
- [Archive](#)  
Contains vocabularies that are no longer actively presented to users.
- [EPA Staging Taskview](#)  
Staging area for imported EPA files.
- [Federal Enterprise Architecture Glossary](#)  
Contains terms and concepts concerning Federal Enterprise Architecture
- [Gemet](#)  
Gemet Load View
- [ORD Taxonomy](#)  
Taxonomy for the ORD Group
- [Quality Glossary Taskview](#)  
Contains a prototype quality glossary vocabulary for the EPA Quality Office
- [Training Taskview](#)  
This Taskview contains all training vocabularies. Some are general and most are named for the trainee.
- [Vocabulary of Vocabularies](#)  
Databases of vocabulary names and vocabulary types
- [Web Taxonomy - Faceted](#)  
Groups all the WBT facet vocabularies under a single taskview.

[Log Out of Synaptica](#)

**Synaptica is compliant with ANSI/NISO Z39.19**

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
**TERMINOLOGY SERVICES**

Logout  
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[Home](#) | [Search & Retrieve](#) | [Manage Terminology](#) | **Automated Services** | [Content Workgroups](#) | [Outreach & Education](#) | [Training](#) | [Administration](#)

### Automated Services

All Web services introduced in Synaptica 7.0 and later will be marked with their corresponding Synaptica version release. For example, GetSavedReport70 was released with Synaptica 7.0. Web services without numeric endings (e.g., Login) are those still valid from Synaptica 6.4.

Title	Description	Documentation	Automated Type	Contact
01. Login	Users may log in to obtain a session key. Valid session keys can then be passed to all Synaptica web methods as authentication with the exception of Login. Web methods called with a valid key are executed under the context of the user that was granted the key. User may have up to 50 session keys at a time to perform multiple synchronous operations.	<a href="#">Synaptica Web Services API v70_20080204</a>	V6.4 Web Service	<a href="#">System Administrator</a>
02. Logout	This method expires a session key making it invalid. As a security measure, Logout should be called to release any session keys obtained by a user that will no longer be needed.	<a href="#">Synaptica Web Services API v70_20080204</a>	V6.4 Web Service	<a href="#">System Administrator</a>
03. ListTaskViews	This method returns a list of the taskview profiles a user has permission to.	<a href="#">Synaptica Web Services API v70_20080204</a>	V6.4 Web Service	<a href="#">System Administrator</a>
04. ListTaskViews70	This method returns a list of the taskview profiles a user has permission to. It has the exact same functionality as ListTaskViews, but its input parameters are complex XML types. This is the preferred method call for this functionality.	<a href="#">Synaptica Web Services API v70_20080204</a>	V7.0 Web Service	<a href="#">System Administrator</a>
05. ListVocabularies	This method returns a list of the vocabularies a user has permission to within a Taskview.	<a href="#">Synaptica Web Services API v70_20080204</a>	V6.4 Web Service	<a href="#">System Administrator</a>
06. ListVocabularies70	This method returns a list of the vocabularies a user has permission to within a Taskview. It has the exact same functionality as ListVocabularies, but its input parameters are complex XML types. This is the preferred method call for this functionality.	<a href="#">Synaptica Web Services API v70_20080204</a>	V7.0 Web Service	<a href="#">System Administrator</a>
07. ImportTerms	This method imports terms and relationships provided in valid RDF/SKOS format as defined in "Synaptica_RDF_SKOS_specification_20061129.doc". Import data formatted in Synaptica OWL, Zihes 1.0 and Synaptica Zihes 0.5 are also supported.	<a href="#">Synaptica Web Services API v70_20080204</a>	V6.4 Web Service	<a href="#">System Administrator</a>
08. ImportTerms70	This method imports terms and relationships provided in valid RDF/SKOS format as defined in "Synaptica_RDF_SKOS_specification_20061129.doc". Import data formatted in Synaptica OWL, Zihes 1.0 and Synaptica Zihes 0.5 are also supported. It has the exact same functionality as ImportTerms, but its input parameters are complex XML types. This is the preferred method call for this functionality.	<a href="#">Synaptica Web Services API v70_20080204</a>	V7.0 Web Service	<a href="#">System Administrator</a>

Export an RDF/SKOS representation of one or more vocabularies from

## Stewardship is Key

- Stewards are owners of vocabularies
- Every vocabulary must have a steward
  - Responsible for maintenance of the vocabulary
- Supporting stewardship
  - Tools: Synaptica, wikis
  - Guidance: Best Practices, Governance Structures
  - Training
  - Access to expertise



## Current Efforts



- Enhancing Repository Content
  - Vocabulary Roadmap
    - Archival, updates, additions
- Identifying Stewards
- Exploring 'value added' opportunities
  - My Environment
  - Web Content Management System
- EPA Office of Research and Development Managed Vocabulary
  - Use Cases
    - Integrated Modeling
    - Science Inventory
    - MyProject Glossary
    - Spell Checker

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Slide 15

## Future Directions



- Enterprise access to terminology development expertise
  - Developing Blanket Purchase Agreement
- Firmly establish terminology stewardship; help foster communities of interest
- Provide legal & other priority terminology
- Evolve toward concept management
  - Concept Management Roadmap
    - EPA thesaurus
  - Data Locator

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Slide 16



## For More Information

### Contact:

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pendleton.michael@epa.gov  
(202) 566-1658



“Now! *That* should clear up  
a few things around here!”  
Gary Larson – The Far Side