Managing Knowledge

NOAA Needs Assessment Report for the PWSU-CIWG

Dr. Tracy Irani and Deidra Slough

Why use a CMS?

Current set-up (below) and potential opportunities (right)

Public Water Supply Utilities Climate Impacts Working Group

The "Public Water Supply Utilities Climate Impacts Working Group" (PWSU-CIWG) is a collaborative effort focused on increasing the relevance of climate change and variability data and tools to the planning and operations of Florida's public water supply utilities. The partners are interested in how climate variability/change and sea level rise may impact planning and operations of Florida's public water supply utilities. The collaborative working group promotes shared knowledge, data, models and decision-making tools among public water suppliers, water resource managers, climate scientists and hydrologic scientists.



Partners

Gainesville Regional Utilities

Miami-Dade Water and Sewer Department

Orlando Utilities Commission

Palm Beach County Water Utilities

Peace River Manasota Regional Water Supply Authority

Tampa Bay Water

Saint Johns River WMD

University of Florida Water Institute

Florida Climate Institute

South Florida WMD

Southwest Florida WMD

Florida State University, COAPS South East Climate Consortium

UF/IFAS Center for Public Issues Education

Projects

"Collaborative Development of Public Water Supply Utility Relevant Climate Information for Improved Operations and Planning." Funded by NOAA CSI-Water

Executive Advisory Committee Meeting Notes, November 2011

Working Group Documents

- · Synthesis of Preliminary Stakeholder Phone Meetings, September, 2010 Wendy Graham and Lisette Staal, UF Water Institute (Report)
- · A Review of Regional and Global Water Utilities Use of Climate Information Victoria Keener, PhD. University of Florida, Southeast Climate Consortium (Handout Workshop 1)
- Bibliography of resources related to Climate and Water Utilities Victoria Keener, PhD, University of Florida, Southeast Climate Consortium (Handout Workshop 1)
- · Working Group Monitoring and Feedback Research Summary of Report 1 Wendylin Bartels, PhD, University of Florida, Florida Climate Institute (Handout Workshop 2)



Example CMS



Dimensions

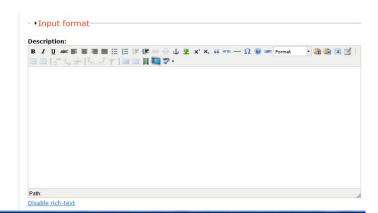
Browse By Type

Search for the type of resource you are seeking such as questionnaires, video, etc.

Types Menu

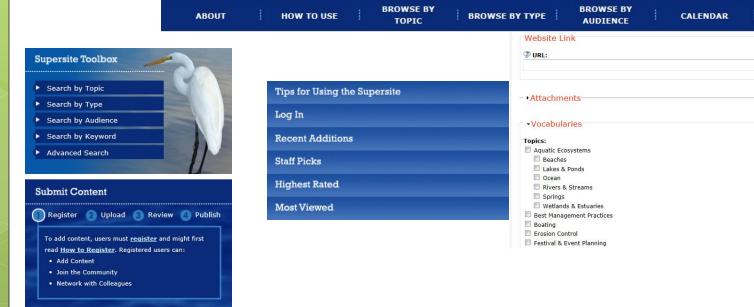
Home > Browse By Type

Audio & Visual Media
Awards & Competitions
Case Studies
Classroom Lesson Plans & Activities
Conference Proceedings
Curricula
Grants & Funding
Ordinances



COMMUNITY

FORUMS



FLORIDA STORMWATER SUPERSITE

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Behind the Scenes

2. COMPONENT DETAILS

Some of the features listed below may be deployed after initial site launch.

2.1. Most Popular

A listing of the most-viewed resources on the Supersite.

2.2. New Resources

A listing of the latest resources posted to the Supersite. These are identified through a checkbox in the Admin section. Not all items added to the website will be featured under New Resources.

The list of New Resources can be set, through the Admin section, to display either chronologically (with most recent first) or in random order.

2.3. Related Resources

A dynamically generated list of resources that have similar tags/topics as the resource currently displayed. This component will display in either the right column or beneath the main body of the page, depending on site design. If there are no related resources for a given resource, the component will not display.

2.4. Footer Requirements

One page footer will be used throughout the site, and the CMS will allow editing and updating of all page footer items. The page footer will include the following:

- · Link to Organization contact information
- Link to popup window containing Copyright information. Includes definition of the copyright status and digital rights management of all contributed items.
- Disclaimer (The word "Disclaimer" will link to a database article, which can be
 updated through CMS). Disclaimer text will alerts the user to the potential
 variability of data quality. An example of a disclaimer can be found on the
 Seminole Water Atlas at

www.seminole.wateratlas.usf.edu/DataDownload/Disclaimer.aspx

Developer will include a date script that automatically displays the current year.

2.5. Frontpage Manager

This component is available in the CMS for Administrators to manage content to be displayed on the homepage. A checkbox in the Add/Edit Article Component, along with a Start Display and End Display date, controls how article is set for homepage display.

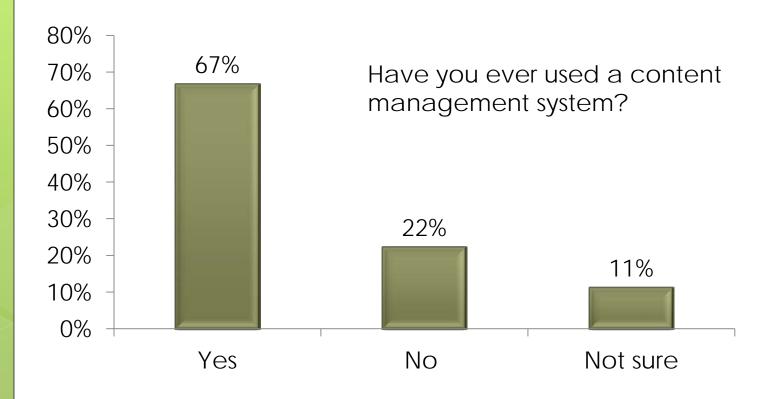
Methodology

- Survey development
 - Pre-test
 - 3 members of the PWSU-CIWG
 - Construction in Qualtrics
- Survey dissemination
 - Link to online survey provided via e-mail
 - ~3weeks to complete
 - 3 e-mail reminders sent
- Responses
 - 16 members of the working group

KMS Goals

- Centralize information
 - Easy access
 - Up-to-date
 - Sharability
- Educate stakeholders

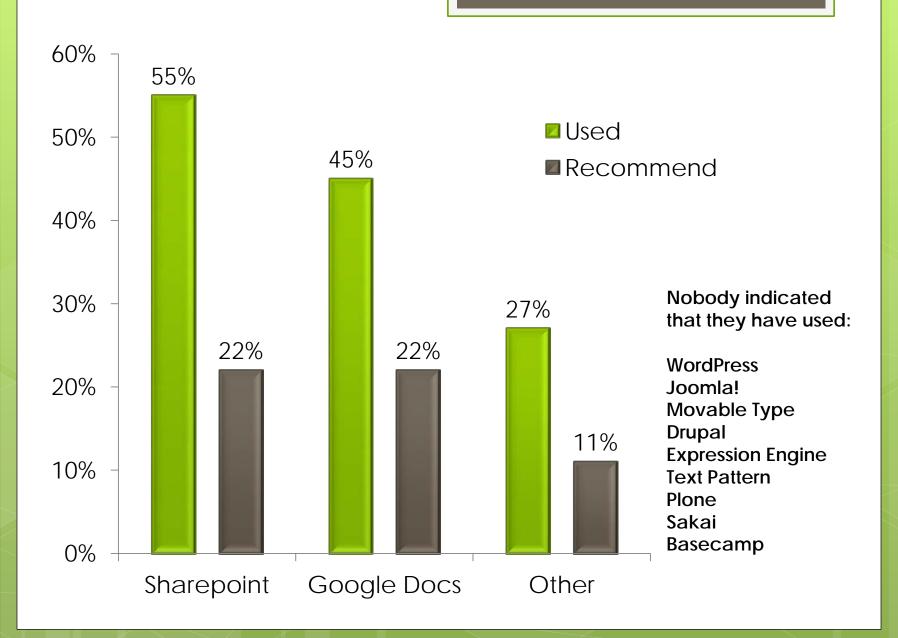
Previous CMS use



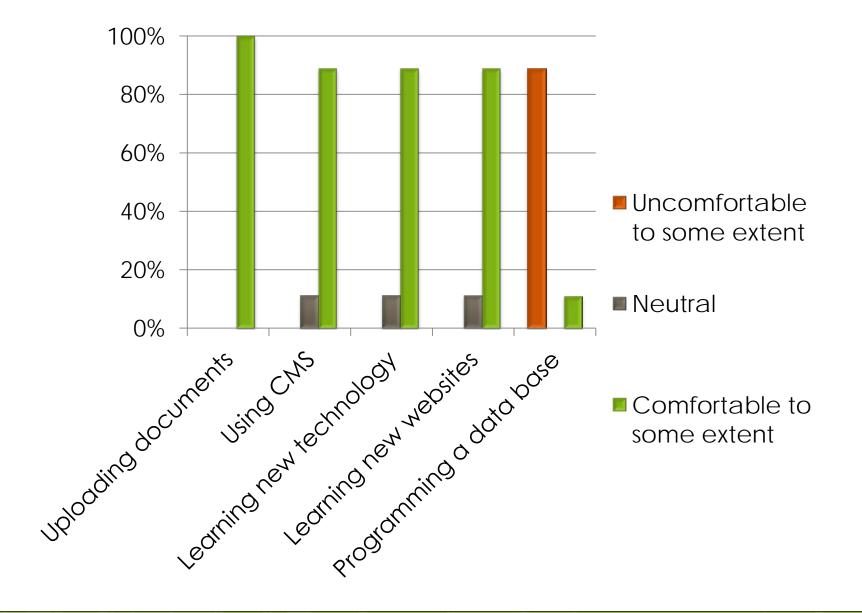
Microsoft SharePoint IBM Enterprise Content Management Google Docs

Dropbox Agency-based systems

Recommendations



Comfort Considerations

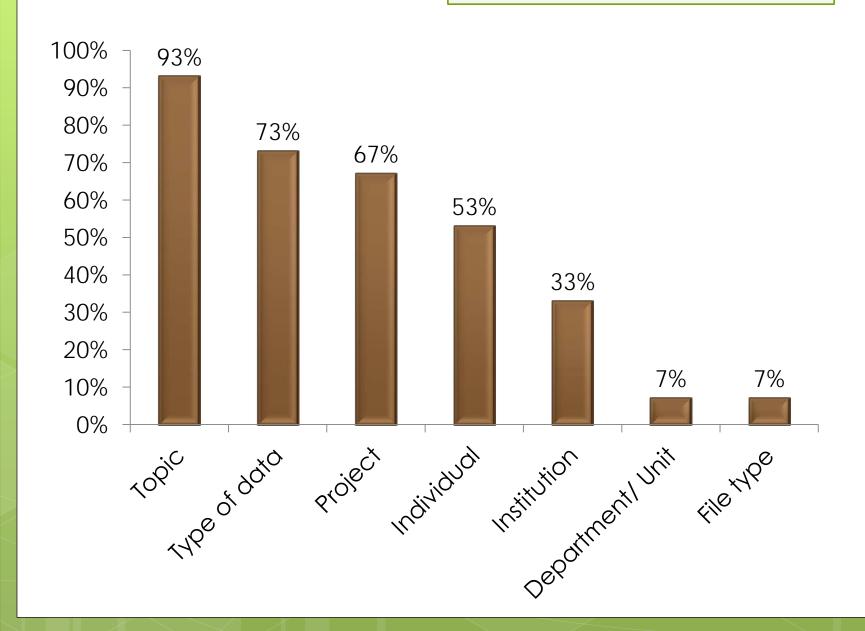


Data types to share

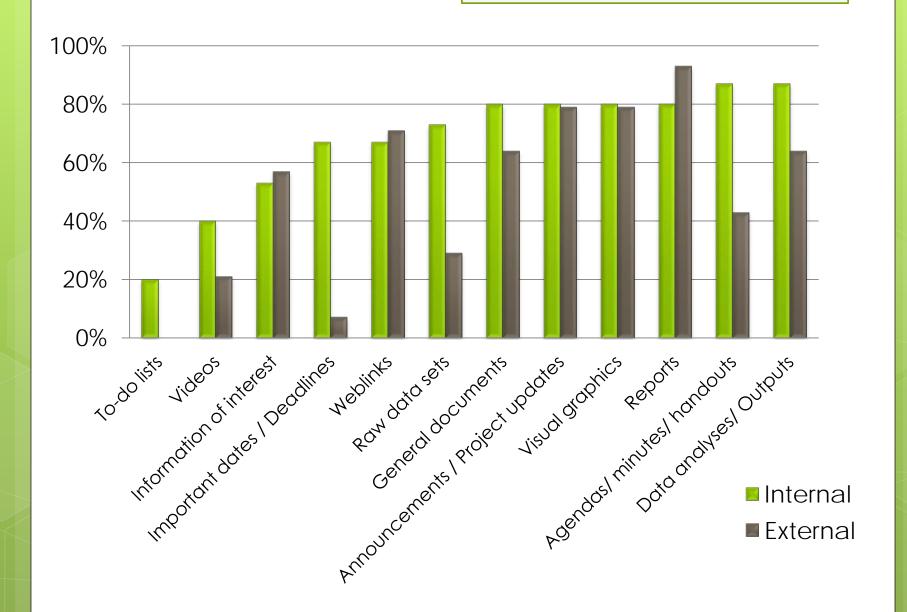
- Word documents
- Excel
- PDF
- o GIS
- NetCDF
- MATLAB
- Computer code/ Script
- Text files
- Images

*SAS and SPSS were provided as options and nobody indicated that they intend to share these file type. We suspect that outputs and reports will be the main mode of information transmission for people using these programs.

Data organization



Content communication



Barriers

Barrier	Mean
Inconsistent terminologies across disciplines	3.07
Miscommunication among working group members	2.33
Level of support from respective institutions, departments, or units.	2.13
Varying types of data files used	2.07
Unequal access to or distribution of resources among working group members	1.93
Financial cost associated with collaboration	1.80
Personal time invested	1.80
Differing institutional, department or unit policies	1.73
Security of information	1.73
Distance between working group members	1.53
Trust	1.47
Unequal participation among working group members	1.47
Adoption of new technologies	1.27
Dispersed data storage	1.27

1= Not a barrier at all
 2= A slight barrier
 3= A moderate barrier
 4= An extreme barrier

Recommendations

 Create a sub-committee to oversee development

As we progress towards the development of the knowledge management system with the content management component, we will need to identify strategies for overcoming the barriers that have been identified. We recommend the creation of a sub-committee to oversee development and make decisions regarding organization, common language, etc.

Questions?

Thank you!!!