CERM Guidance Memorandum
South Florida Water Management District – Jacksonville District, U.S. Army Corps Of Engineers

CGM NUMBER-REVISION: 033.01

EFFECTIVE DATE:

CATEGORY: Web Management

SUBJECT: CERP Web Design Usability and Graphic Standards

DESCRIPTION:
This memorandum establishes protocols for the implementation of graphic and usability standards for the CERP public and internal websites and all other CERP sub-webs and/or applications. The purpose of this guidance memorandum is to outline the basic web site accessibility and usability practices that should be implemented and maintained on the CERP web sites as well as provide procedures for ensuring a consistent, professional visual identity for the CERP web sites.

These standards will be overseen by the current CERP Web Content Manager (see CGM 006). The Web Designer (see CGM 006) shall provide initial graphic and interface consultation as well as provide html templates, page layouts, style sheets, headers and all graphic images as needed for the CERP public web, in addition to CERP sub-webs and applications. These designs will be consistent with current CERP web design aesthetic and accessibility standards and should provide a clear, consistent, professional visual identity for the CERP public web as well as CERP sub-webs and applications. An accessibility checklist will be provided for guidance if requested. While these guidelines and templates while be provided by the web designer, each developer/application owner is responsible for adhering to the guidelines on pages they modify/create. The Web Designer and Development Team should work closely together to assist each other in implementing these standards.

GUIDANCE:
Protocols for the implementation of graphic and usability standards for the CERP Public Web, CERP sub-webs, and applications are as follows:

This document provides working level guidance to assist Project Delivery Teams in the implementation of the Comprehensive Everglades Restoration Plan (CERP) program executed between the South Florida Water Management District and the U.S. Army Corps of Engineers. The guidance does not constitute policy for either agency nor does it create authority beyond that granted to any agency member carrying out their duties. Guidance reflecting agency policy on subjects listed in the guidance memoranda section of the programmatic regulations for CERP will be issued when the final programmatic regulations are adopted, using the process stated in the regulations.
Site Accessibility

**Title Tags** - All pages should be titled. The page title should clearly indicate the page contents (i.e. "Maps and Data")

**Alt Tags** - All images should have an alt tag attribute that conveys meaning to the user. Non-significant images should have blank alt tags (use alt=""). The blank ALT statement hides the graphic from text-only browsers and from browsers that read text aloud for visually impaired users.

**Image Attributes** - All images should have height and width attributes. This speeds up page rendering and eliminates browser refresh.

**Contrast** - Navigational graphics should have appropriate contrast as to be usable for individuals who are visually impaired. Page designs and color schemes should be tested with a tool (e.g., VisiCheck) to see if they work with the different kinds of color blindness.

**JavaScript** - Alternate text-based navigation must be provided for JavaScript based navigation systems (i.e. dynamic html)

**Browser Compliance** - Pages must be usable and degrade gracefully for Netscape 4.0 and Internet Explorer (IE) 5.0 equivalent browsers. Presentation may vary but functionality should be retained.

**Platform Compliance** - Pages must be tested on and usable for, both Mac and PC Platforms. Pages should degrade gracefully on older browsers. Progressive enhancement is encouraged.

**Screen Resolution** - Pages should be designed for 800 by 600 browser resolution (760 pixel wide design). If pages are larger than that, the maximum should be 1024 by 768 pixels and a print style sheet should be provided.
Generally, the page widths should not change from page to page but remain consistent throughout the site.

Printing - 585 pixels is the maximum width required for default setting printing for most users. Each page should have a print style sheet attached.

Proprietary File Types and Players - Any page containing a SWF (Flash) or PDF file type must contain a link to a page where the user can download the player application if needed. Alt tags for the player icon should be reviewed for clarity.

Multimedia Files - Provide captioning of audio, video and animation files.

Screen Flicker - Avoid technologies that cause the screen to flicker. This can cause seizures in some users.

Font Size - Fonts will be in resizable formats or a style sheet switcher must be available for users to increase the font size.

Forms - Forms must be accessible and tested in Lynx or Jaws. This should be coordinated with the web programming team.

Frames - The use of frames on the CERP public web site and CERP sub-web/applications is strongly discouraged and should not be used. Frames will only be allowed if the following issues are addressed and resolved: printing issues, book-marking issues, back and next functionality issues. The use of Server Side Includes (SSI) is recommended instead.

Navigation - A maximum of five to seven top-level navigation categories are recommended. Ensure that all parts of the navigation are accessible without a mouse. Add a skip navigation link on all pages for keyboard-only and adaptive technology users. Hide the skip navigation with Cascading Style Sheets (CSS) for other users.
Site Map - A text based site map should be provided and a link to it should be added to the footer of each page. Dynamic web sites should implement a dynamically generated site map for users.

Page Size (KB) - As a general guideline pages should remain under 150 Kilobytes (KB).

File Formats – Files should be converted to PDF format and optimized for web viewing. This includes setting compression settings in Adobe Acrobat for viewing on the web as well as being sure the file is coded for “fast web view”. This allows the file to appear in the browser while still downloading in the background. This is particularly helpful for large files.

File Sizes - File size should not be greater than 5mb. Information on how to convert and optimize a PDF document for the web will be provided on the server.

Semantic Markup – Markup should be valid, structured and semantic. This includes the correct DOCTYPE. CSS should be used to separate content from presentation. The use of DIV tags and H1-H6 tags should be used sequentially and logically and instead of CLASS tags when possible. In addition, it is recommended to use the EM (emphasis) and STRONG tags instead of I (italic) and B (bold) tags so screen readers can interpret them correctly.

HTML Tables - The use of tables for layout should be limited to data and container tables for content only (hybrid layouts). Data tables should be properly linear as each row is read from left to right. Use TH, TD, THEAD, TBODY and SCOPE tags appropriately.

Homepage Link - All pages in the site should have a link at the top of the page to the homepage of the site.
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Meta Tags - All pages should have Meta tags for the following categories: title, description and keyword. Additional Meta tags are optional but encouraged.

Site Visual Standards

Visual Standards Overview - Graphic design and interface design is extremely important for a successful and professional presentation of online information.

Web Design - The Web Designer (see CGM 006) shall provide initial graphic and interface consultation as well as provide html templates, page layouts, style sheets, headers and all graphic images as needed for the CERM public web, in addition to CERM sub-webs and applications. These designs will be consistent with current CERM web design aesthetic and accessibility standards and should provide a clear, consistent, professional visual identity for the CERM public web as well as CERM sub-webs and applications. These designs will be consistent with current aesthetics. The Web Designer may function just as a consultant or as an active participant on the site production team. The Web Designer will provide all page layout, html templates, style sheets, graphics and reviews in a timely manner and will provide original (un-flattened working files) to the sub-team graphics department or will create graphics for the sub-team on request.

Cascading Style Sheets (CSS) - CERM web sites and all CERM sub-sites and applications should use style sheets for presentation. Custom style sheets will be provided by the Web Designer as required for CERM sub-webs/applications. The use of font tags should be avoided. All style sheets will be annotated and training on their application will be provided as needed. Content should be separate from presentational elements.

Page Layout and Design - Appropriate and professional page layout and design will be implemented for all pages on CERM Web sites. The production team will work cooperatively with the Web Designer to determine the appropriate treatment for that sub-web/application.

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Application Interface Design - Appropriate navigation architecture and user interface design will be implemented for all pages on the CERP Public Web. The production team will work cooperatively with the Web Designer to determine the appropriate treatment for that sub-web/application.

Site Management

Server Side Includes (SSI) - The use of SSI is strongly recommended as a component of site management.

Headers - An appropriate header will contain a link to the homepage of the main web site and will be on all pages that fall under the CERP Web sites. The Web Designer will work with the sub-web/application production team to determine the appropriate graphic treatment.

Footers - All pages should contain text-based navigation footers for all pages that use images as navigation items. Footers should also contain appropriate links to utility pages (disclaimers, contact us, etc) as needed. CERP sub-webs and applications may need to have their own disclaimer and/or privacy statements depending on the content. The Web Designer will work with the sub-web/application production team to determine the appropriate content and treatment.

Linking to Sub-Webs - CERP sub-webs/applications that reside on a separate server or are not integrated into the existing CERP Web sites site navigation will open in a new window. This should be noted on the link if possible.

Contact Us/Webmaster Links - A "contact us" or "webmaster" link should be provided on all CERP Public Web pages. All CERP sub-webs/applications should have a content owner with a "mail to" link designated preferably on each page.

Content Coordinator – On public web pages, the program and projects pages should designate content owners on each page.
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