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REGIONAL WATER AUTHORITY RESPONSIVE WEBSITE DESIGN & DEVELOPMENT
DEFINE DOCUMENT – Ver3

By Multimedia Solutions
August 27th, 2018

PREPARED FOR

≈Regional**Water**Authority

South Central Connecticut Regional Water Authority
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Regional Water Authority Website Design and Development
Define Document v3
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Contents

1) Document Overview

This Define Document sets forth the specifications for the development of a new public website for the new South Central Connecticut Regional Water Authority (Regional Water Authority).

2) Site Structure

2.1 Wireframe Structure

The wireframe structure is set forth in reference to document: CRWA_wires – V1

2.2 Content Map

The content map is detailed as attachment – Content_Template_Map

3) Global Elements

3.1 Header

The Header navigation will be made up of the following elements:

- RWA Logo (links to homepage)

Top Level Navigation
- About Us (Drop Down Menu)
    - o Tapping the Possibilities (includes link to 360 tours)
    - o Purpose, Mission, Vision, Values
    - o 2015-2020 Strategic Plan
    - o Management Team
    - o Boards
        - ▪ Membership
        - ▪ Meeting Notices, Agendas & Minutes
    - o Conscious Business
    - o Storied History
    - o Careers
- Customer Care (Drop Down Menu)
    - o Account Login
    - o Payment and Billing
    - o Residential Water Assistance Program

- o   Quality, Care and Value
- o   Rates, Regulations and Ownership
- o   CodeRED
- o   Imposter Alert
- Water Quality (Drop Down Menu)
  - o   Turn to Tap Water
  - o   Drinking Water Regulations and Standards
  - o   Lead Service Lines and Solder
  - o   Water Quality in Your Home
  - o   Water Quality in Commercial Buildings
  - o   Drinking Water Quality Reports
  - o   RWA Lab Services
- Innovations (Drop Down Menu)
  - o   Advanced Metering Infrastructure
  - o   Infrastructure Work and Water Main Cleaning
  - o   PipeSafe Protection Programs
- RWA Connect
  - o   Account Login
  - o   First Time User
  - o   Pay Bill
  - o   Start/Stop Service
  - o   Report a Problem

- Site Search icon (this will expand to allow text entry)

Secondary Navigation
- Select Language (Drop Down) – integrate Google Translate API
- Contact Us

Header Requirements:
- The logo links back to the home page.
- The search field needs to be recognizable to a screen reader for ADA purposes and the magnifying glass icon should trigger a submit button on the screen reader.
- The header navigation links are editable in the CMS.
- The header will include an emergency alert message panel that will display immediately beneath the header. The message is managed through the CMS by selecting an enabled state to show the message.

3.2 Footer

The footer will be made up of following:

- Logo (links to homepage)
- Physical Address
- Contact Us
  - Phone Number TeLink
  - Non-Emergency Hours
  - Contact Email: ask.info@rwater.com (mail to link)
- Social Media Icons
  - Facebook
  - LinkedIn
  - Twitter
  - Instagram
- Privacy Policy/Terms of Use (link to pages/PDF)
- Site Copyright
- Site Designed and Developed by Multimedia Solutions Inc. – link to www.multimediasolutions.com

4) Homepage Functional Elements

4.1 Hero Panel

The top panel supports a hero image that spans the width of the screen, tagline message text.

- The hero image is managed via the CMS and must be sized in accordance to the specs in the style guide to render properly.
- The tagline text is managed via the CMS. The CMS will include a choice of 3 styles to be outlined in the style guide:
  - Light Blue
  - Dark Blue
  - White
- Hero panel search feature text is managed via the CMS. The CMS will include a choice of 3 styles to be outlined in the style guide:
  - Light Blue
  - Dark Blue
  - White
  - The search field will be set up with an auto suggest drop down where users need to type a minimum of 3 characters to see relevant results from Bing search.

- Hero panel action tiles:
  - News & Community
  - Register for CodeRED
  - Careers
  - The Action tiles will link out to urls or PDFs as managed by the admin. The icon imagery and text is managed via the CMS.

4.2 Explore Our Products & Services Panel

The Explore our Products & Services panel is used to showcase selected products with the following parameters:
- Panel Title text is editable in the CMS.
- Per Design a maximum of 3 drop shaped image graphics can be displayed
- Each tile consists of the following properties:
  - Background image that is managed via an image placement tool in the CMS that allows positioning to the proper specifications.
  - The following will link out upon interaction:
    - image
    - Title text
    - Learn More link text

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4.3 Learn More Panel

The Learn More panel consists of interactive tiles arrayed in rows of 3. Each tile contains the following elements:
- Background image managed via the CMS. The background image must be sized to spec as provided in the style guide.
- Title Text – the title text is white on top of a blue background band. Each tile has a strict character limit of 32 characters to fit the design.
- Selecting either the image or tile will link to the targeted url or document. Links are managed via the CMS.
- The section consist of 6 tiles and 6 tiles are required to hold the layout.

5) Front End Data Capture Forms

The site will have the following data capture forms

- Contact/Inquiry Data Capture Form: used for general inquiry submission
- Email Opt-in Form: used to sign up for email alerts (Located on the Related Items panel on the Publications Page)

All forms on the website should write to the database and should be exportable within the CMS and the admin should be able to select a date range.

Exporting the database from the CMS will export the database via an Excel spreadsheet along with field submissions (ex. name, email, etc.).

All records will remain in the database even if previously exported.

5.1 Contact/Inquiry Data Capture

This form is intended for customers who have general questions and would like to submit contact information to RWA:

Contact Fields
- First Name (Required) – 50 characters text entry
- Last Name (Required) – 50 characters text entry
- Address (Required) - 100 characters text entry
- City (Required) – 50 characters text entry
- State (Required) – Drop Down list of US States (set CT as the default)
- Postcode – will allow numbers and letters
- Phone (Required) – 10 Characters phone entry (3 numbers) – 3 numbers – 4 numbers
- Email (Required) – 100 characters text entry. Must be formatted as email address.
- Questions & Comments - 500 characters text entry.

The form will function as follows:

For security, the user must first check the recaptcha box prior to hitting submit.
Upon submission, a thank you message will appear on the screen and an email notification will be sent to [CLIENT EMAIL].

Also upon submission, an HTML email will be sent to the user who submitted the form. This email will be sent from [CLIENT EMAIL].

[CLIENT]'s email recipients' email addresses will be editable in the CMS.

5.2 Email Opt-in Form

This form is used for visitors to sign up to receive email distributions

The form will contain the following fields:

- First Name (Required) – 50 characters text entry
- Last Name (Required) – 50 characters text entry
- Email (Required) – 100 characters text entry. Must be formatted as email address.

The form will function as follows:

For security, the user must first check the recaptcha box prior to hitting submit.

Upon submission, a thank you message will appear on the screen and an email notification will be sent to [CLIENT EMAIL]..

Also upon submission, an HTML email will be sent to the user who submitted the form. This email will be sent from [CLIENT FROM EMAIL ADDRESS].

[CLIENT]'s email recipients' email addresses will be configurable in the CMS.

6) Other Functional Requirements

6.1 Subpage Hero Panel

The hero image spans the width of the page. This image is editable in the CMS but must be sized according to specifications to render properly in the page design.

The Subpage H1 Head resides in a blue panel immediately below the hero image. The text is editable through the CMS. This head must read as the H1 head in screen readers for ADA purpose.

6.2 Tabbed Menus

Some pages feature a tabbed menu as a secondary navigation option:
- The tabbed menus navigate to different URLs that share the same hero panel.
- Tabbed Menus need to be limited to a maximum of 3 items to work within the design
- The menu titles are editable in the CMS

6.3 Accordion Menus

Pages such as FAQs and Members of the Representative Board Policy feature accordion menus.
- The admin can manage the number of rows in the accordion menu.
- The title text (question) and body text (answer) are editable in the CMS.
- By default, only one accordion box can be open at one time. If another box is opened, then the original box will close.
- There is an option to open all the accordion boxes at the same time by selecting the "View All" link. This link will change to "Close All" when in an open state.

6.4 Meetings, Notices, Agendas & Minutes filter

This table will display results based on 3 filters:
- Year – drop down menu in reverse chronological order. The top menu item will be "All" which will include a full listing of all the years.
- Meeting Category – drop down with
    o Regional Water Authority
    o Representative Policy Board
    o HazWaste Central
- Meeting Type – listing of meetings under the major Categories. The listing has 2nd tier information such as:
    o Authority
    o Authority Audit Committee

    o   Authority Environmental, Health, Safety & Risk Committee
(Etc.)

Results will be displayed in reverse chronological order in rows of 10. The results will paginate beyond 10 rows.

6.5 Payment Locations

Payment Locations utilizes a Google maps window in the hero space to display locations based on address. Location names and addresses are listed in rows of tiles below the map window.

- Hovering on a map pin or a tile will show a pop-up window on the map that has the location name and a " Get Directions" link
  - o Selecting the "Get Directions" on either the pop-up window or the location tile will open that address location in Google map directions

6.6 Innovations & Projects

Our Projects utilizes a Google maps window in the hero space to display locations based on address where projects are taking place

- Hovering on a map pin, polygon shape or a tile will show a pop-up window with the following information:
  - o Address/Location
  - o Name of Project
  - o Description
  - o Time frame/dates

6.7 News & Community

The News & Community section features a tabbed layout with the following pages:

- Year – drop down menu in reverse chronological order. The top menu item will be "All" which will include a full listing of all the years.
- Media Center
- Community Outreach
- Regional Economic Development
- Calendar

The Media Center functions as follows:
- The Media Center is a listing page of results that filters by year.
  - o The year drop down menu list results in reverse chronological order. The top menu item will be "All" which will include a full listing of all the years.

- Results are listed in 10 rows per page in reverse chronological order
- Each listing row displays the following information:
  - Date
  - Title Text (links out)
  - Read More link (links out)
- Each listing row will link out to a detail page, an outside page or a PDF.
- The section will paginate after 10 rows of results

The Calendar page is an interactive calendar built from the following source https://fullcalendar.io/ that can be managed through the CMS. The functionality will be guided by the capabilities of referenced plug-in tool.

6.8 Pipe Safe and CodeRED

Pipe Safe and CodeRed have sign up links to external sites that will be integrated as follows:
- Pipe Safe: https://www.pipe-safe.com/
- CodeRed: https://public.coderedweb.com/CNE/en-US/B1C15CCE4D41

7) Site Functionality

7.1 Site Search

Bing Site Search Engine will be used to provide search capabilities. The current RWA license will be utilized to implement this on the new site.

7.2 Google Analytics

Google Analytics and Google Tag Manager will be used to provide site analytics by implementing page-level and event-level tracking.

7.3 Videos

The site is set up to display and play videos.

The site does not host any video files. All of the video on the site is hosted by YouTube. An editor uploads their video files to YouTube. Each video that has been created on the YouTube platform has a unique id known as the YouTube id. The video document in WordPress has a property for the YouTube Id. The YouTube Id connects the video document in WordPress with the video hosted on YouTube. The YouTube Id is used to load the video on the page.

The site is using the YouTube video player. The player is customized using YouTube's configuration tool. The YouTube embed code loads this player and the correct video based on the YouTube Id.

8) Global Requirements

1. Social media icons will link to the respective social media pages. Social Media Channels are as follows:
    a. Facebook
    b. LinkedIn
    c. Twitter
    d. Instagram
2. Site Search will be Bing Site Search.
3. Copyright should automatically update to the following year at midnight on Jan 1st, EST.
4. All text should be html text when possible.
5. Headers and other styling needs to be configured as CSS classes within the CMS.
6. The logo in the upper left should link back to the home page.
7. All forms on the website should write to the database and should be exportable within the CMS and the admin should be able to select a date range. Exporting the database from the CMS will export the database via an Excel spreadsheet along with field submissions (ex. Name, email, mailing list preference etc.). All records will remain in the database even if previously exported.
8. Validation for form is: Required Fields need to be filled out or there will be an error message.
9. Google analytics tracking will occur at the page level.
10. The Content Management System will be Umbraco.
11. The site will be built in English and utilize the Google translate api to display other languages.
12. The site will be built to be ADA "AA" Compliant.
13. Panels and Tiles that feature link outs to other pages need to link from the following elements:
    a. Designated Link text such as "Learn More", "Read More", "Full Bio"
    b. Title Text
    c. Image

9) CMS Requirements

9.1 Umbraco Core Functionality

MSC has identified the following core functionality for Regional Water's new website:
- Content Editing – The ability to add / edit / delete / format page content.
- Site Management - The ability to add / edit / delete site navigational sections.
- Template Management - The ability to create new or revise existing content templates.
- Asset Management – The ability to add / edit / delete video and file assets as autonomous entities.
- Audit Trail – The ability to view clear audit trails of what content was updated by who and

when, as well as the ability to roll-back.

- Vanity URLs – The ability to create vanity URLs allowing administrators to move, create and delete pages without breaking internal links.
- Friendly URLs – The ability to utilize and govern SEO friendly URLs.
- User Management – The ability to add / edit / delete administrative users and control what content administration functions they are grant.
- Scheduling Content – The ability to set publish and expiration dates for content elements.
- Performance Management – The CMS must inherent enable page caching to enhance site performance.

Umbraco Content Management System Details

Regional Water's specific CMS requirements are met with the out of the box functionality with the exception of an integrated tracking and analytics tool.

Regional Water's CMS Requirements:	Umbraco Standard Functionality
Supports Modern web standards and trends	✓
Flexible structure and templates	✓
WYSIWG Editor with Spell Checker	✓
Edit / Approve Workflow	✓
Permissions / Roles	✓
Audit trail	✓
Versioning and Rollback of content	✓
Keyword Friendly URL's for maximum SEO	✓
Integrated Tracking / Analytics	Google Analytics will be used to provide Analytics
Media Library – to manage images, videos, PDFs and Excel Spreadsheets	✓

The following are the specifications for Umbraco, the Content Management System engine.

The Editor

Content will be facilitated through a Word-like WYSIWYG editor to modify page content, including text with images. Without using HTML coding, the WYSIWYG editor facilitates the following features:

- Type in, highlight and format text.
- Create tables and columns.
- Insert images, videos, or other special content.
- Work on a page without publishing it on the website, providing the ability to do multiple revisions and only make the page public when ready.

- Standard WYSIWYG editor functions include: save, preview, switch to HTML mode, undo, redo, cut, copy, past, select styles, bold, italics, center, bulleting, indent, add link, unlink, insert anchor, insert image, image upload, create table, insert special characters. A toolbar provides easy access to this functionality:

Managing Assets

The CMS will provide the ability to create and organize a hierarchy of media files, images, documents, and other files. These files can be moved or renamed without breaking the links to the content that is contained in the file. Important features to consider during the customization of the solution in the CMS are:

- All CMS pages need to have an SEO tab to configure Page Title, Page Description, Page Keywords.
- All CMS pages must have a Hide/Unhide checkbox to be included or not in Sitemap or navigation.
- Content should be organized by navigation hierarchy so that URLs are built dynamically and help SEO.
- All pages must use Umbraco's redirect feature to void broken links when pages are deleted or moved.
- Content nodes that expect to have more than 20 items must be implemented using an easy to maintain approach defined by the admin. For example, press releases should be organized by year, month, and category or alike. Unless otherwise specified, this hierarchy should be defined by the user, not by the system.

Search

Bing Site Search will be used to provide search capabilities. Regional Water will provide a Custom Search Id to be configured in the CMS.

Content Creation

The CMS must not impose any design or content layout restrictions on any content templates and allow Regional Water to complete control and flexibility in how content is presented. The CMS must allow Progress Investment 100% control over template layouts and markup, including the CSS files.

Multiple Website Support

The CMS can manage multiple domains. The CMS also provides the ability to manage aliases to maintain different URLs previously linked to Regional Water's site. This will ensure that users can connect to the new site even if they use previously bookmarked links.

Workflow

Regional Water's new Content Management System will provide users the ability to edit and publish content. Currently there is no predefined legal review workflow but can be established as part of the CMS.

Permissions

The CMS has the flexibility to assign as many permission definitions as required by Regional Water. This will allow Regional Water to have back-up individuals in place to publish or modify content should a primary individual becomes unavailable. We recommend the implementation permissions for administrators, publishers, and editors.

Regional Water Authority will establish a hierarchy of approval to meet Compliance standards.

10) Compatibility & Technical Requirements

a) *Technology Stack*

- Content Management System………………   Latest version of Umbraco CMS

- Desktop Browser Compatibility……………   As of the start of the development
    phase of this engagement:
    Latest two major versions of Microsoft
    Internet Explorer – IE 11 and IE Edge.
    Latest two major versions of the following
    browsers:
    - Firefox (Windows & Mac),
    - Google Chrome (Windows & Mac),
    Latest major versions of the following
    browsers:
    - Safari (Mac).

- Smartphone Browser Compatibility………..   iOS – Version 10 and Version 11
    Safari Browsers.
    Android –Latest two major versions
    of Nougat and Oreo as of the start of
    the development phase of this
    engagement.

- Framework……………………………………..   Microsoft .NET 4.6 or higher
- Web Server…………………………………....   Microsoft IIS 8.5 or higher
- Database……………………………………….   MS SQL Database 2014 R2 or higher
- Operating System……………………………   Windows Server 2014 R2 or higher

11) Acceptance

Approval of this Define Document acknowledges that the requirements and specifications of Regional Water's public website have been documented to the satisfaction of Regional Water.

Approval does not include any areas or requirements that are noted as "to be determined" or as change order requests. Additional definition of these areas will be provided under separate cover.

Future requirements / specifications should be submitted by Regional Water to the Multimedia Solutions' Project Manager. These additions will be considered on an individual basis and treated as a change order request.

ACCEPTED:

The item(s) detailed in this Define Document are approved as is by Regional Water.

Regional Water acknowledges and agrees that any qualitative or quantitative change requests to the item(s) above subsequent to this approval may incur additional charges and/or affect the project's delivery schedule.

By: South Central Connecticut Regional Water Authority

_____
Name (Print)

_____
Authorized Signature

_____
Date