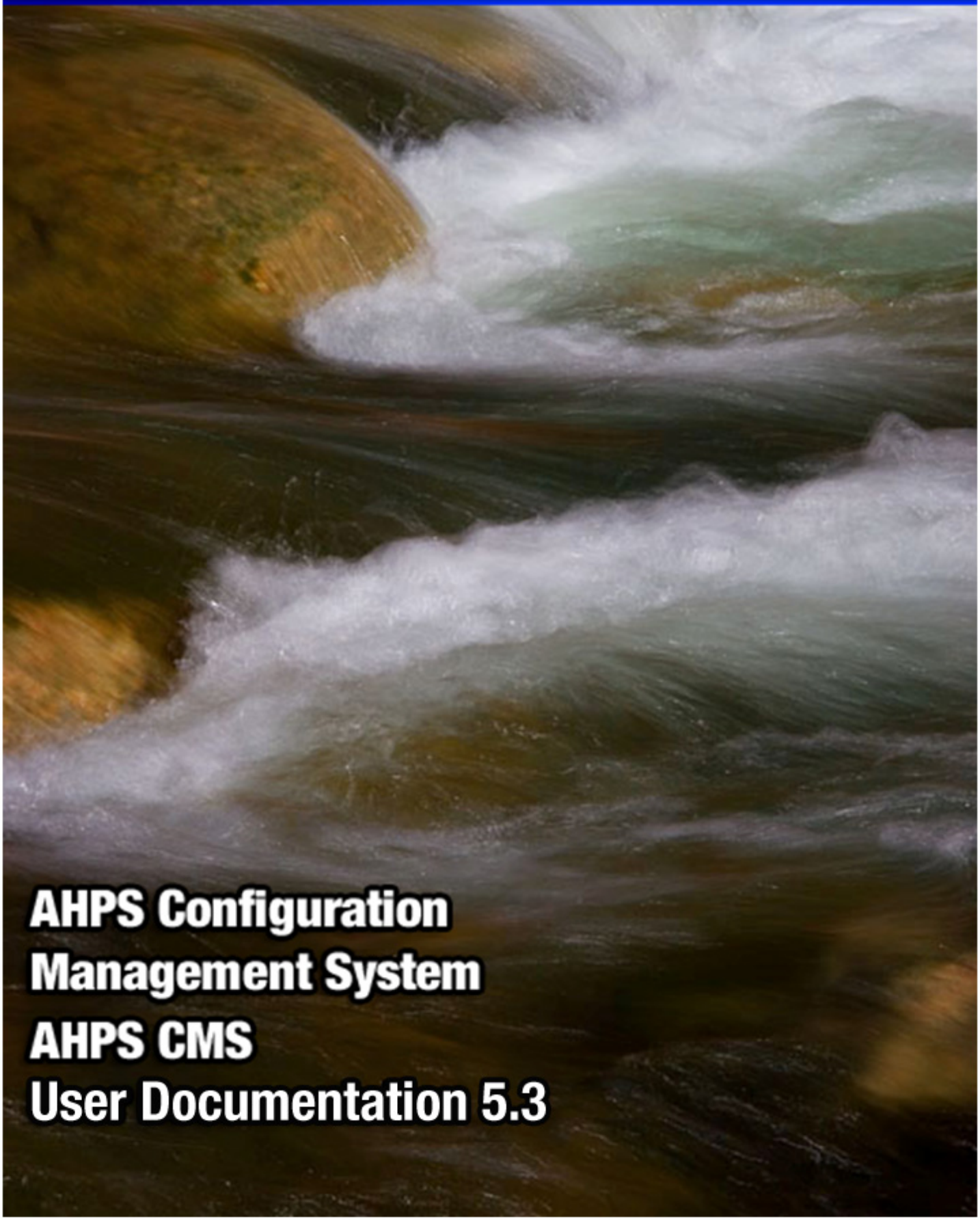
Office of Hydrologic Development



AHPS Configuration Management System

AHPS CMS

User Documentation 5.3

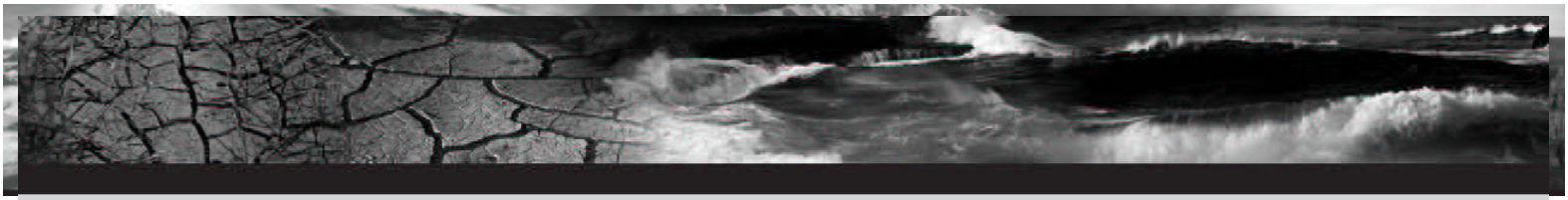
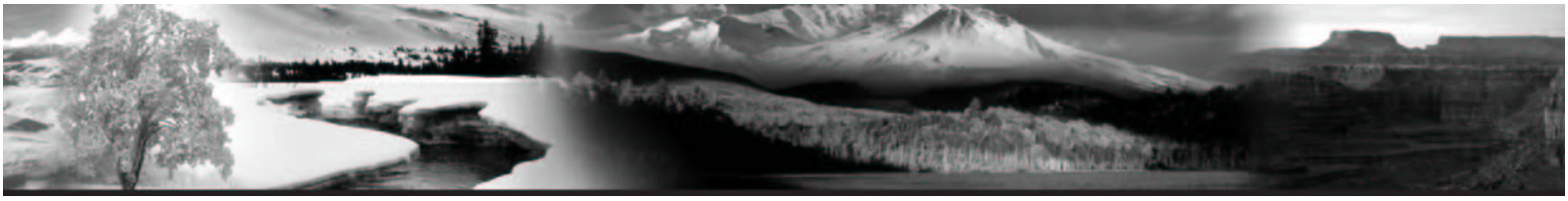


Table of Contents



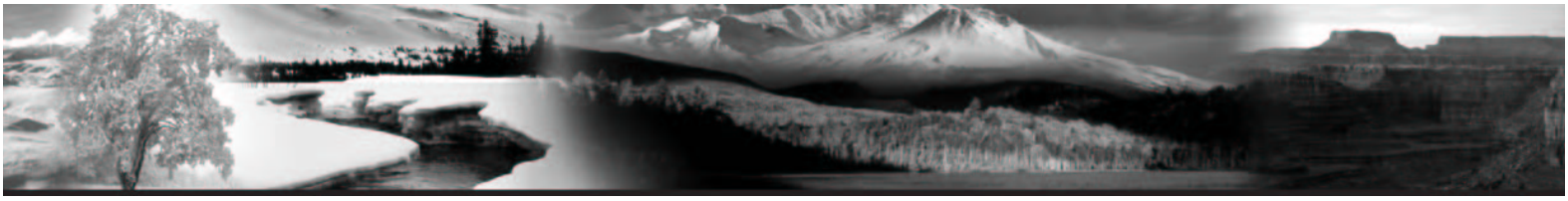
Background

The AHPS Configuration Management System (AHPS CMS) is a web-based interface designed to manage a National AHPS Web configuration database. This release of the AHPS CMS Version 5.3 will provide users with more control over configurable items on HSA AHPS Web pages. This new interface/database provides users with the following advantages:

- Google Maps Based Inundation Mapping (see index)

Moving the AHPS web configuration data to a completely database driven environment opens up a variety of possibilities for future AHPS web page enhancements such as the previous listed items.

With the release of the NWS CMS, a modular experience has been created. Instead of utilizing "hard-coded" fixed button navigation, users can transition seamlessly throughout the AHPS CMS and NWS CMS (access permitting) by usage of a tabular and dropdown navigation that coincides with the Web presence that is currently implemented on the NWS Water Data homepage water.weather.gov. This allows NWS CMS and AHPS CMS to achieve an overall better NWS standard "look and feel". Following the sections on browser requirements and access information below are instructions on how to use the navigational features as well as graphical representations of what users can expect to encounter when they login to the AHPS CMS.



Web Browser Requirements

This document assumes that end users will either be using Internet Explorer 8.0/9.0, Mozilla Firefox 6+, Google Chrome, Safari 4+ or newer browsers.

Data/Password Security

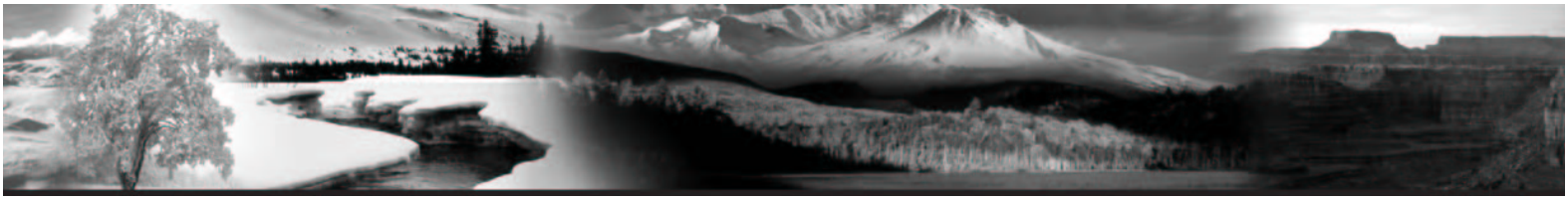
All web browser connections to the AHPS CMS are encrypted via the standard Secure Sockets Layer (SSL) protocol. Mozilla Firefox, Google Chrome, and Internet Explorer all support SSL, and by convention, URLs that require an SSL connection start with https:// instead of http://. The AHPS CMS does not store any passwords and makes a secure SSL connection to a national LDAP server to authenticate users when logging in.

Support Contact Information

If you happen to encounter any issues with AHPS, please report them through the NWS Telecommunications Operations Center (TOC) trouble ticket system. The email address is:

TOC.NWSTG@noaa.gov

AHPS 24/7 Support Contact Phone:
NWS Telecommunications Operations Center (TOC)
(301) 713-0902



User Accounts/Access

User accounts can be configured to allow access to configuration data for an individual WFO / HSA, multiple HSAs, NWS Regions, and/or national access. Current user account configuration is based on information provided by the NWS Regions and can be modified as needed upon request. Please contact your Region to request any user or account changes.

Once an account has been configured for a user, they will receive email from **nws.cms@noaa.gov.** This email contains information on how and where to log into the AHPS CMS. An example is provided below:

Example email:

From: NWS CMS <nws.cms@noaa.gov>
Date: Tuesday, Mar 20, 2012 10:48 am
To: john.doe@noaa.gov
Subject: New NWS CMS Account

You have been given access to the NWS Configuration Management System (NWS CMS) interface. Your password is the same as your normal NOAA password and will change whenever you change your NOAA password.

You have been given access to the following CMS(s)

AHPS CMS

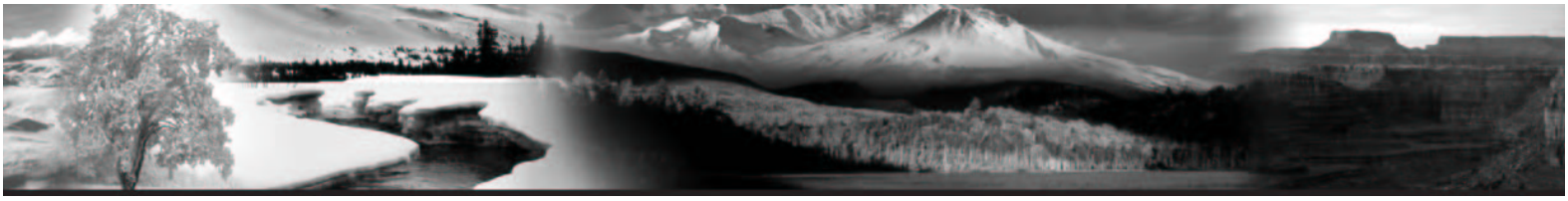
The URL for NWS CMS interface is:
https://nwscms.nids.noaa.gov

Your username is "john.doe@noaa.gov".

Support Information

The URL for AHPS CMS User Documentation is:
https://nwscms.nids.noaa.gov/nwscms/pdf/AHPS_CMS.pdf
You can email TOC.NWSTG@noaa.gov with any questions or comments about the AHPS CMS interface or for immediate 24x7 NWS CMS support, please call:
(301) 713-0902.

Regards,
The NWS CMS Admin Team



AHPS CMS URL

The AHPS CMS can be accessed at the following URL:

https://nwscms.nids.noaa.gov

Logging into the AHPS-CMS

***Important Note**: All the following graphics show the interface in Mozilla Firefox. The interface may look slightly different depending on the browser you are using.

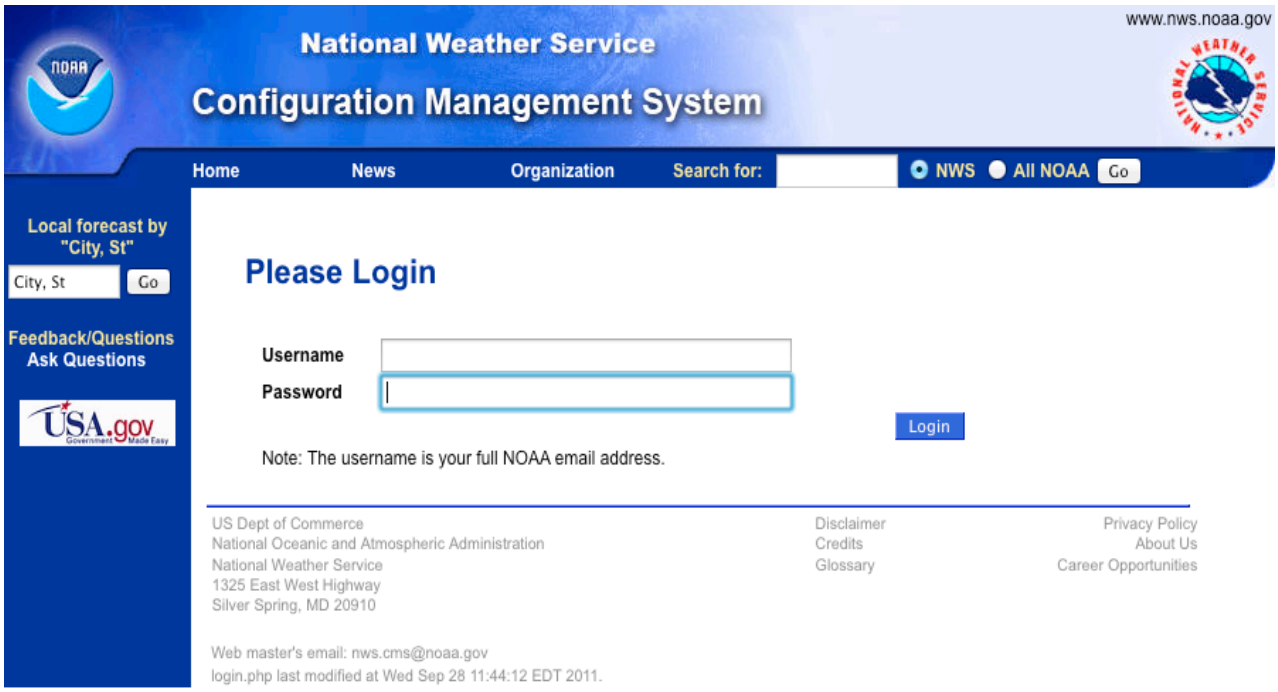


Figure 1: AHPSCMS Login Page

To log into the AHPS CMS site shown in (***Figure 1***); users will enter their full noaa.gov email address i.e. "john.doe@noaa.gov" and their email account password then click on Login. See (***Figure 2***).

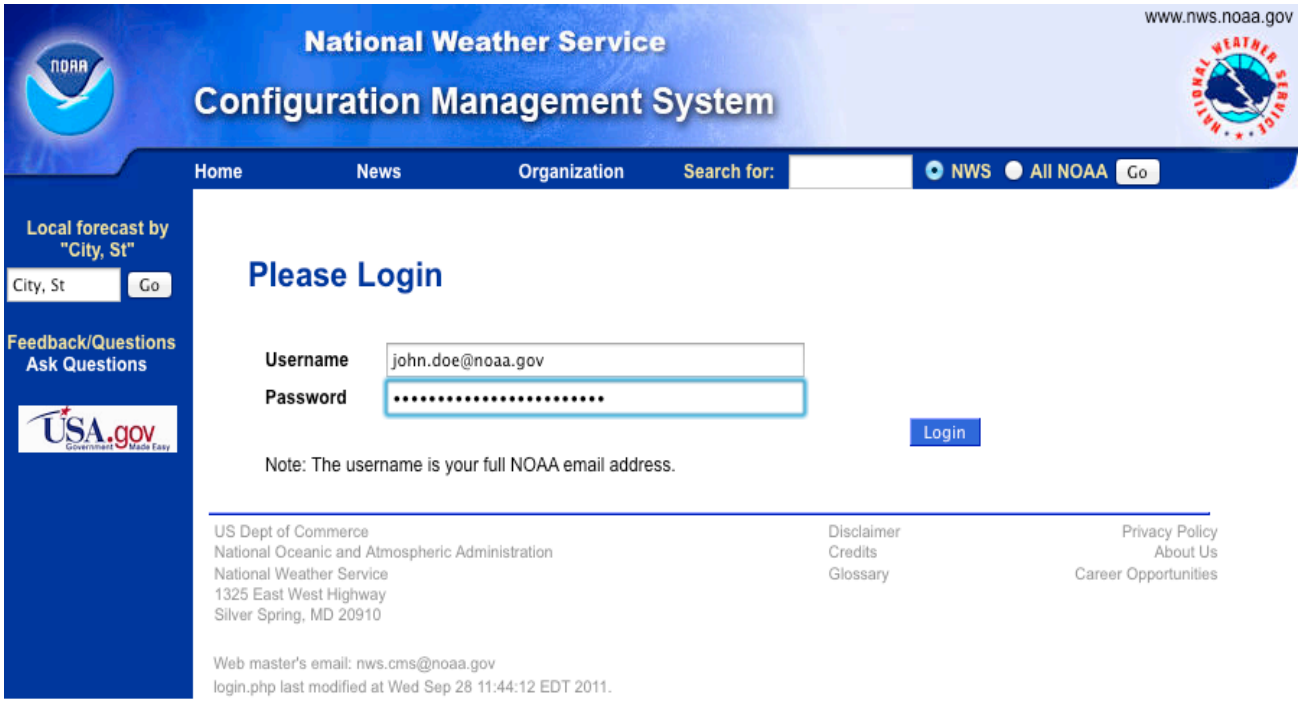


Figure 2: NWS CMS Login Page with User Information

Once a user has successfully logged into the site, they will receive a notice to all users that this is an official government website and is for authorized use only. See (***Figure 3***). At this point users will need to either accept that they are logging into an official government system or logout.

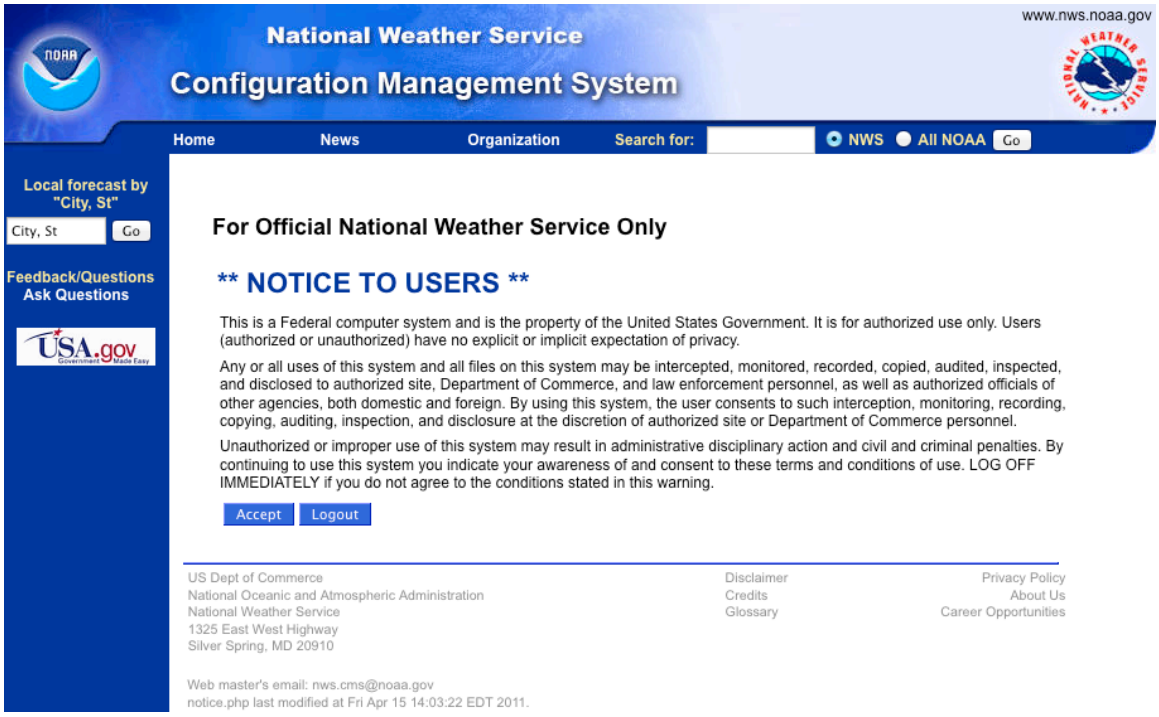


Figure 3: Notice to Users Page

Using the Interface

After clicking on Accept, the end user could see one or multiple NWS CMS Modules depending on the user's access configuration. (***Figure 4***) shows links for AHPS and NWS HSA. In order to access the AHPS CMS, users need to click AHPS. Users will then be directed to a page like the one seen in (***Figures 5 and 6***) which displays links for one or multiple HSAs. In either case, users will select the HSA they wish to view or make Web configuration changes to. Also if users have access to more than one HSA, they can easily sort the lists alphabetically by city or 3-letter HSA ID by clicking either **City** or **Abbrev**.

*****Important Note***: Throughout the rest of this document, HSA Caribou, ME (CAR) and HSA Albany, NY (ALY) along with the sensors located within their area of responsibility will be referenced unless otherwise noted. This is only to decrease the complexity of the documentation. All questions not covered by this documentation will be answered via email or phone, and any reoccurring questions will also be added to the FAQ/Help section of the AHPS CMS web site.

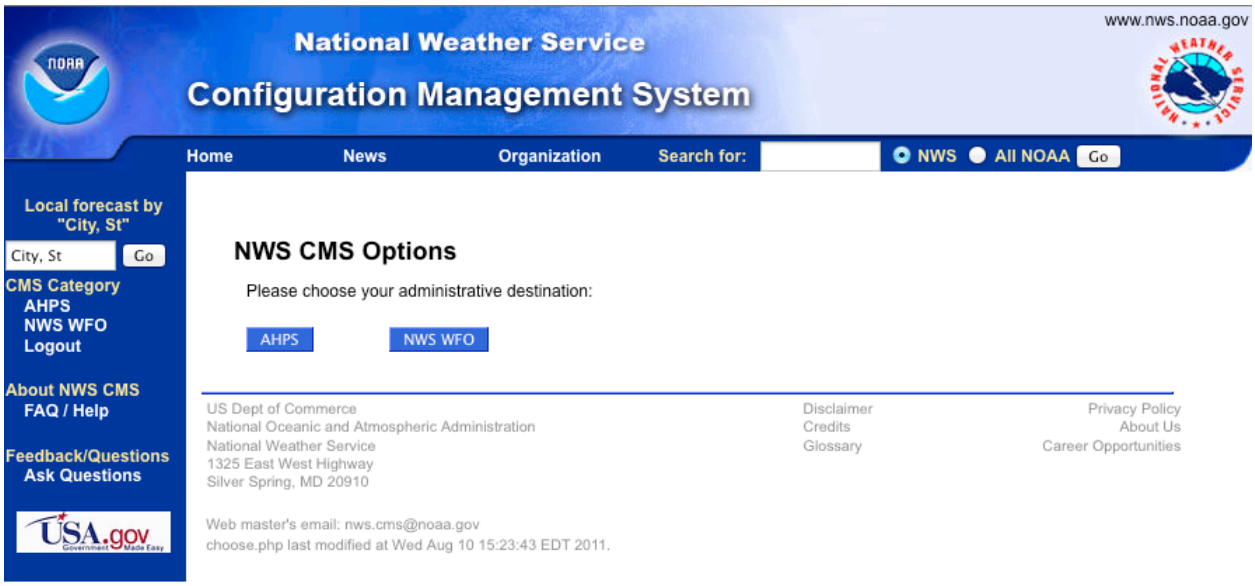


Figure 4: NWS CMS Module Selection Page

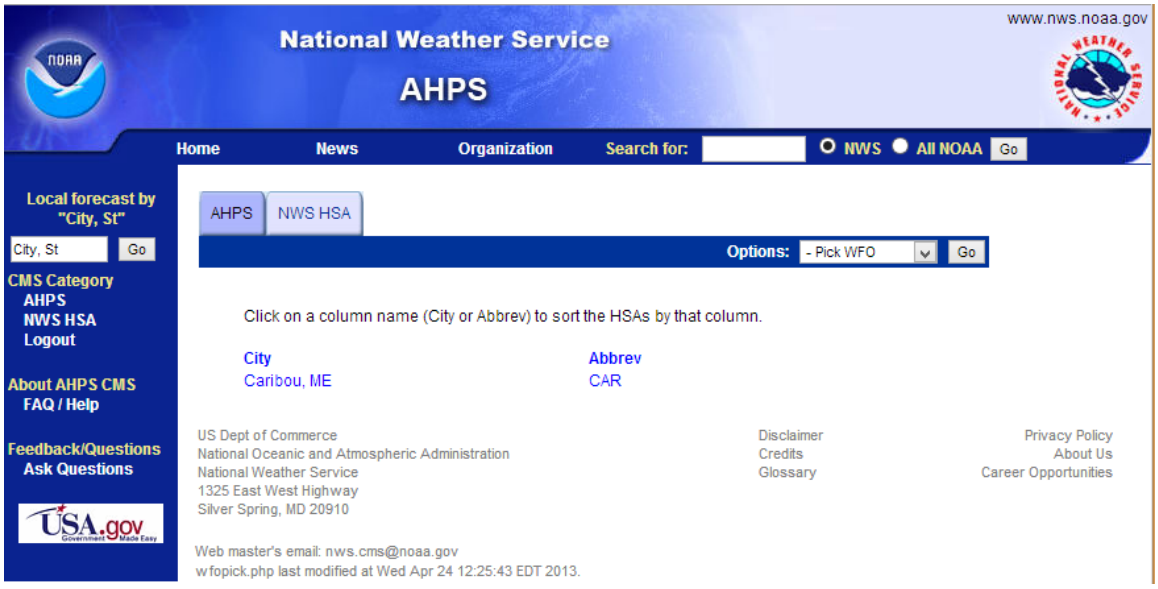


Figure 5: One HSA (HSA Caribou, ME)

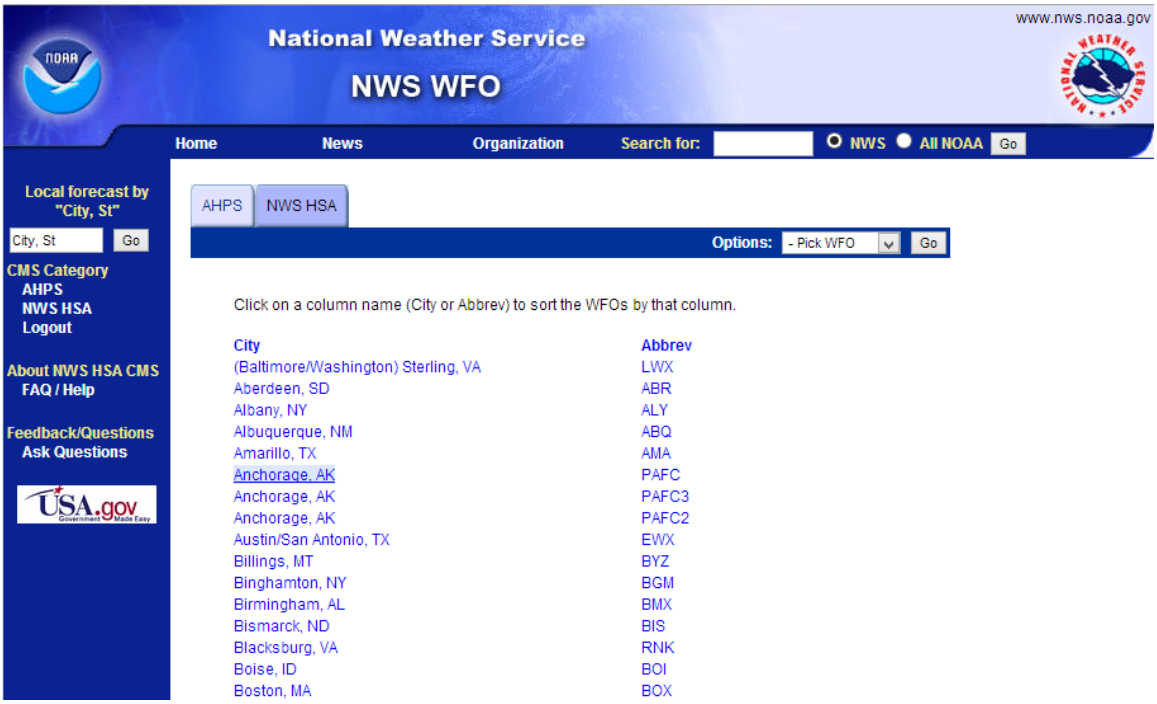
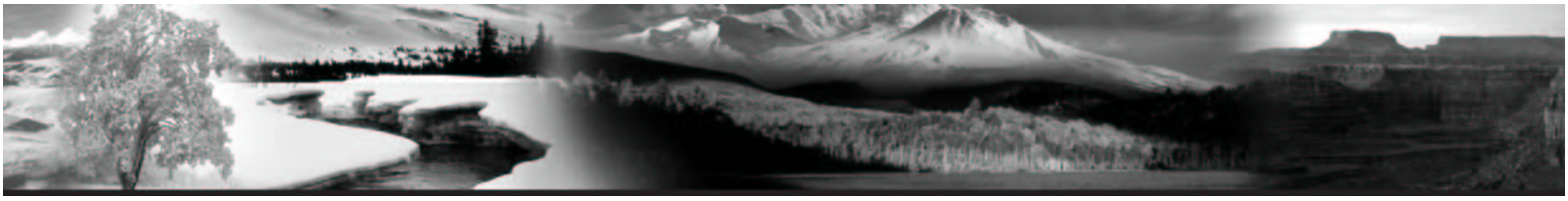


Figure 6: Multiple HSAs

Once users arrive on this page they can observe the tabular NWS CMS module navigation and the "Options" dropdown selection box; (***Figures 7 and 8***) below highlight the navigational items and briefly discuss how they are used.



Tabular NWS CMS Module Navigation

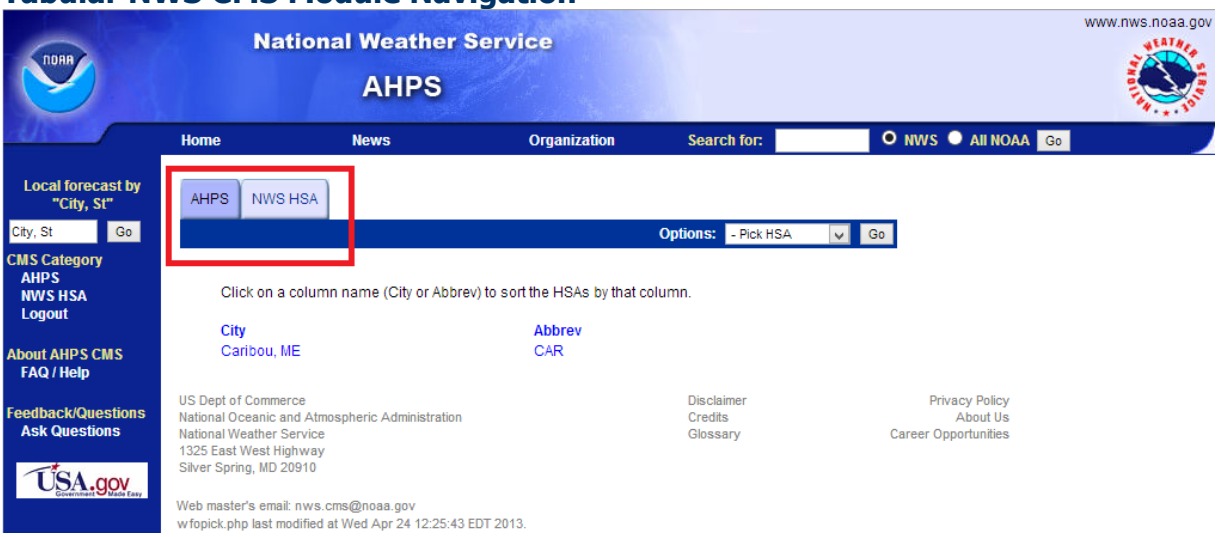


Figure 7: NWS CMS Tabular Module Navigation

The NWS CMS has been built to provide a modular experience, users can simply mouse over the appropriate tab of the module they wish to edit and click; this action will redirect the users to the selected NWS CMS module. In (***Figure 7***) above, the user has access to two separate NWS CMS Modules, AHPS CMS and NWS HSA CMS. This user has the ability to configure items related to their WFO/HSA or make changes to one or more HSA's information depending upon their access configuration. **NWS HSA CMS** will be covered in **Appendix A** of this document.

"Options" Dropdown Selection Box

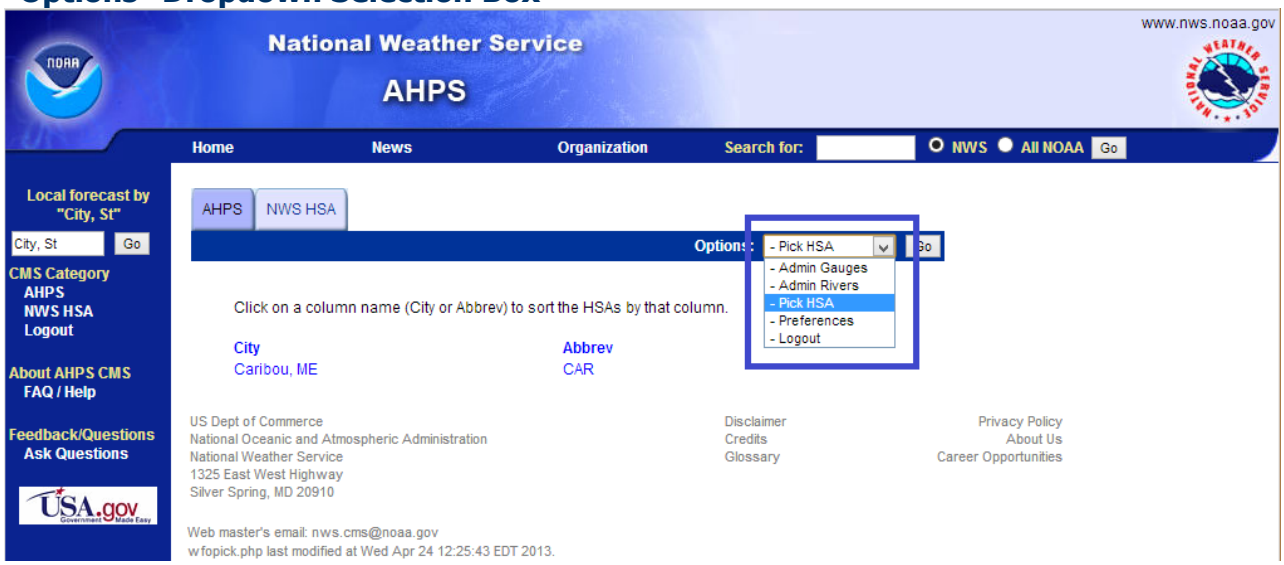


Figure 8: Intra-Module Navigation via "Options" Dropdown Selection Box

Once users have selected a module to configure, in this case AHPS CMS, they can choose to navigate within the options associated with that area of the module. In this case, the user has not selected his/her (WFO/HSA CAR) so they only have the options that are associated with the AHPS CMS such as, Admin Rivers, Admin Gauges, Preferences and the HSA selection. However, once the WFO/HSA has been selected, more options will appear inside this dropdown selection menu. These will be items such as Gauges, Radar Links and other WFO/HSA AHPS configuration items. We will touch on the other Options menu items before going forward with configuration explanations.

FAQ/Help Page

The FAQ/Help page (***Figure 9***) will be used to answer frequently asked questions and provide additional support to users of this interface.

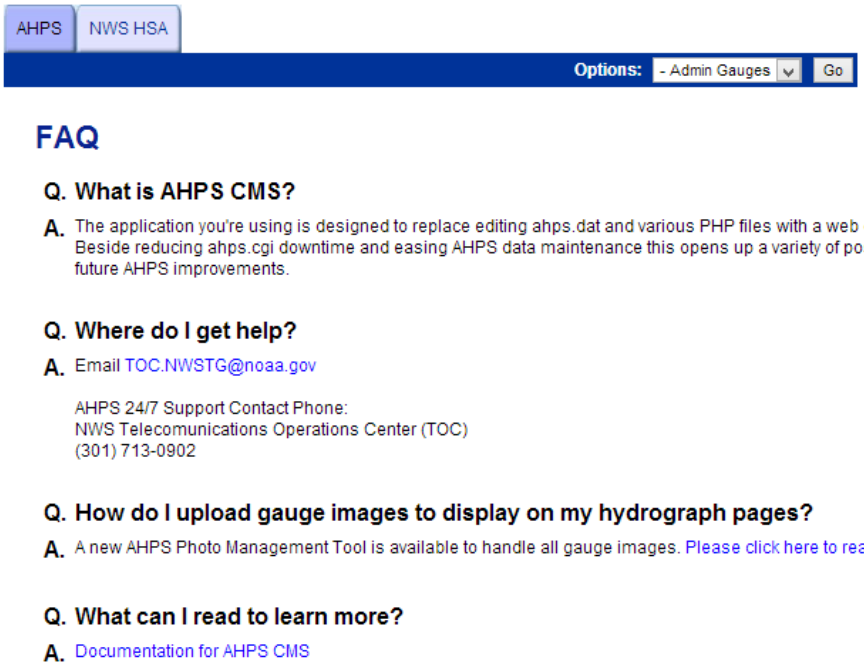


Figure 9: FAQ/Help Content

NWSLID Selection Page – Gauges Page

Once a user selects a HSA, in this case HSA CAR, the NWSLIDs for gauges managed by that particular HSA are listed in alphabetical order by NWSLID. This is the landing page after a HSA has been selected. This list is also downloadable via a link at the bottom of the gauge. See (***Figure 10***).

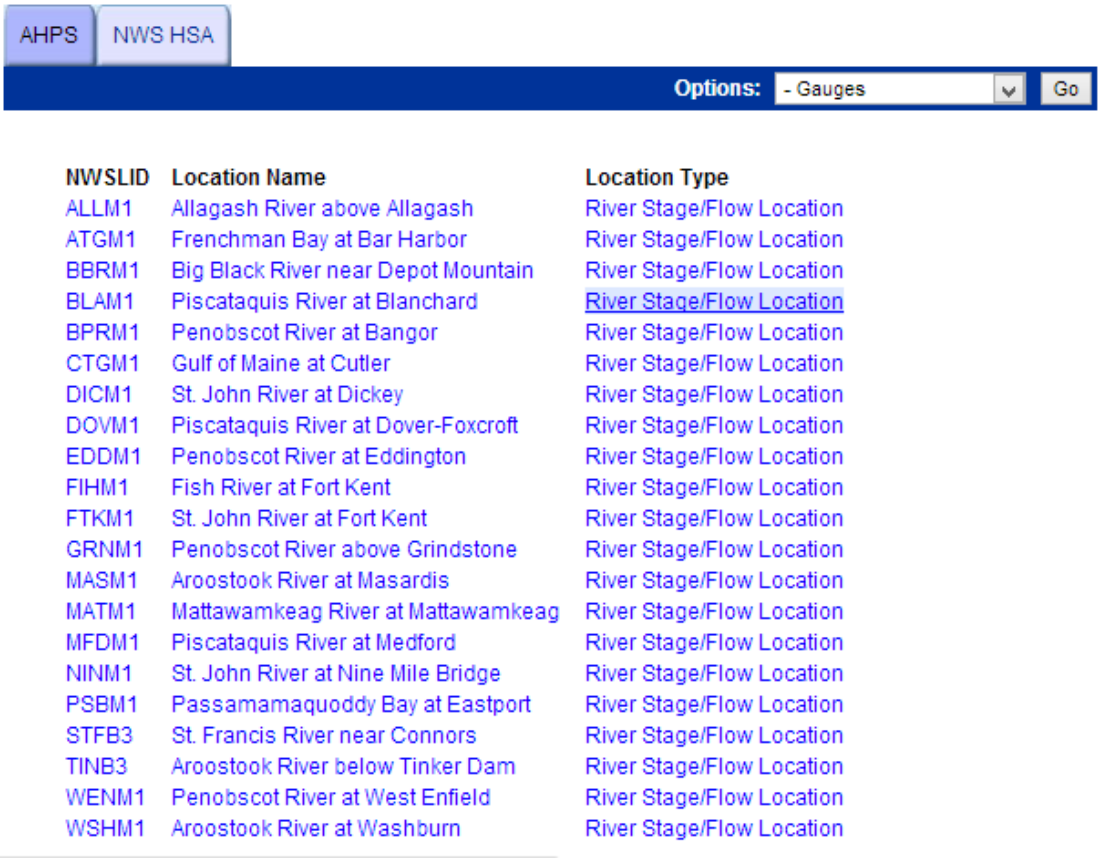
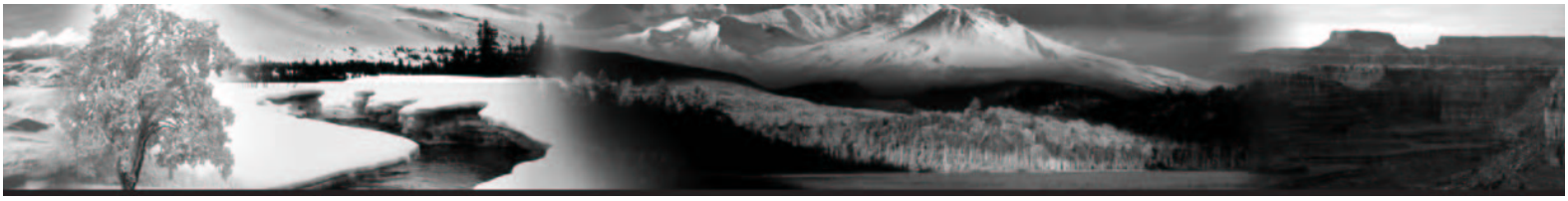


Figure 10: NWSLID Selection Page



Preferences Page

The Preferences Page (***Figure 11***) allows the user to control **Real-time, Daily Summary and Gauge Update** email notification settings. A Real-time email includes changes that are made throughout the day and are transmitted as changes are made. A Daily Summary email includes all AHPS CMS changes made for a 24-hour period and is transmitted once every 24 hours.

A gauge update email notification is an email/feature that sends out 2 types of email notifications:

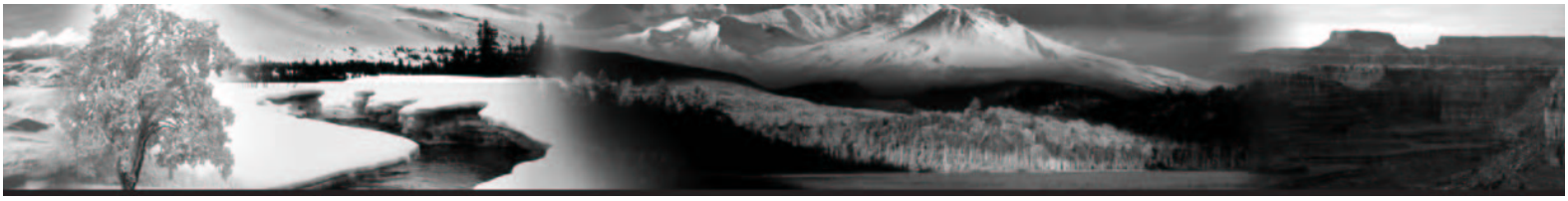
Data Monitoring Email

1) The system will notify users that are associated with an HSA that has gauges that have not updated for more than 12 hours.

HSA Gauge Status Email - 12z

2) Around 12z a process runs to check the status of all HSAs' gauges; this process sends out a gauge status email that notifies users if their HSA has gauges that are not updating. If all gauges are updating correctly users will not receive this email.

Figure 11: Preferences Page



Admin Rivers Page

The Admin Rivers Page (***Figure 12***) allows users to add a new Creek, River, or Reservoir, etc to the AHPS CMS database. ****Important Note***: Please use the **"Browse By Name:"** feature to verify that the water body name desired is not already within the database prior to adding the new water body name. Additionally, this page allows the user to modify the spelling and delete water bodies from the database.

**** Please use Delete, Update and New commands with Extreme Caution! Deletion Confirmation and Update Confirmation will be discussed on the following pages ****

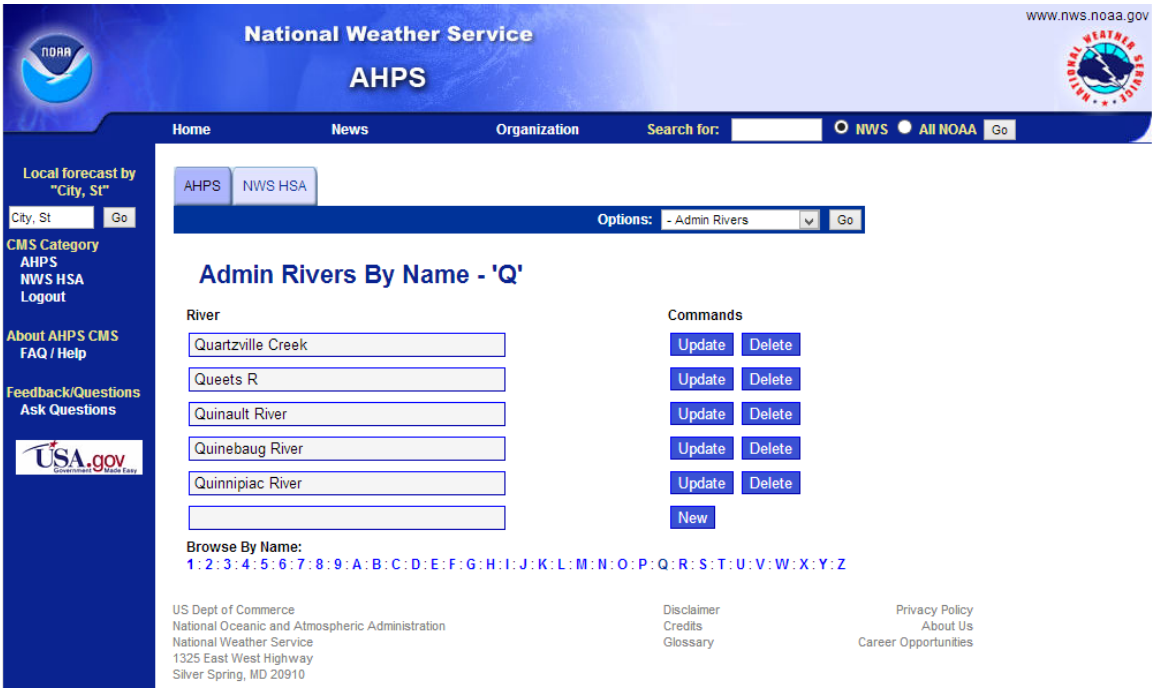


Figure 12: Admin – Rivers Page

Deletion Confirmation

Once a user has decided to Delete an item in the AHPS CMS, a "Deletion Confirmation Page" will appear discussing the significances of this action. This allows the user to confirm that what they are deleting will not adversely affect other HSAs as well as their own office. See (***Figure 13***).

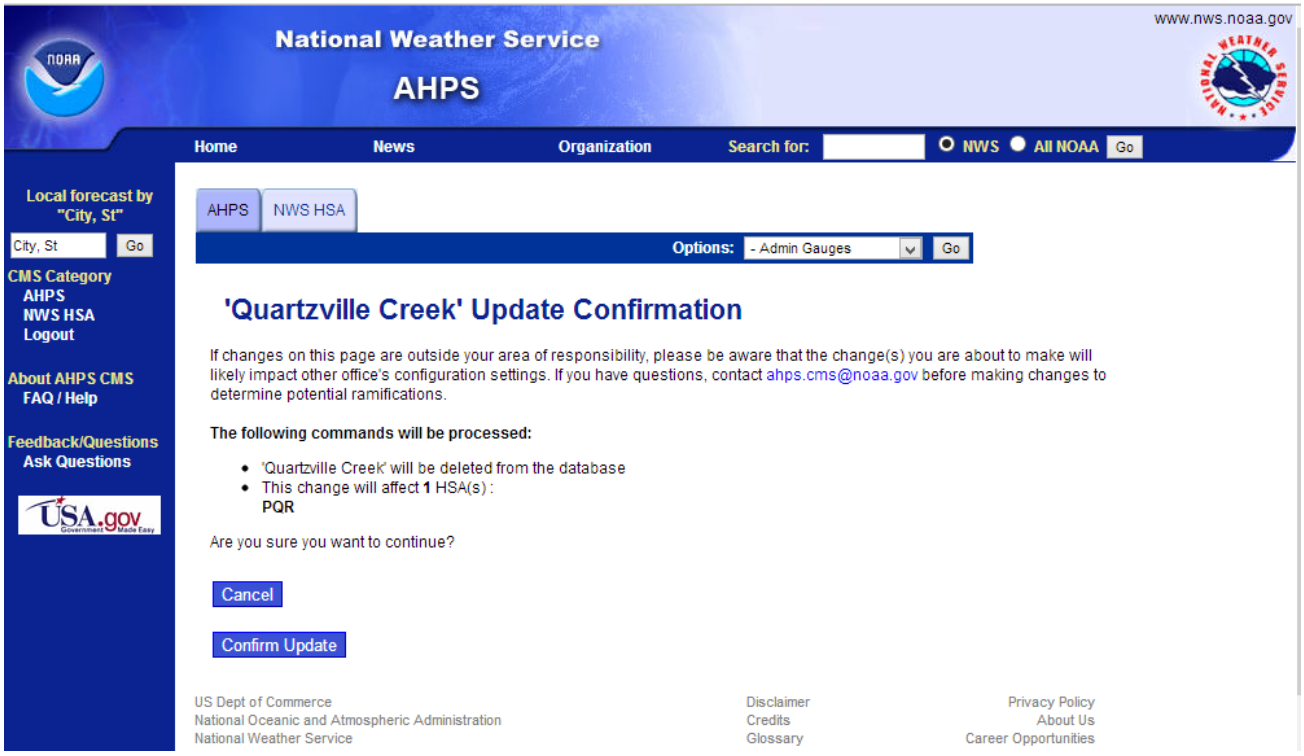
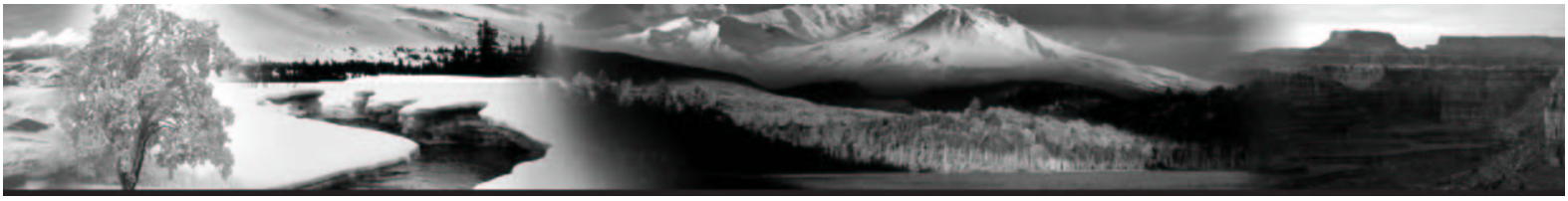


Figure 13: Deletion Confirmation Page



Update Confirmation

Once a user has decided to Update an "Admin" item in the AHPS CMS (an item that will not only effect the user's HSA but also others), an Update Confirmation Page will appear discussing the significances of this action. This allows the user to confirm that what they are changing will not adversely affect other HSAs as well as their own office. See (***Figure 14***).

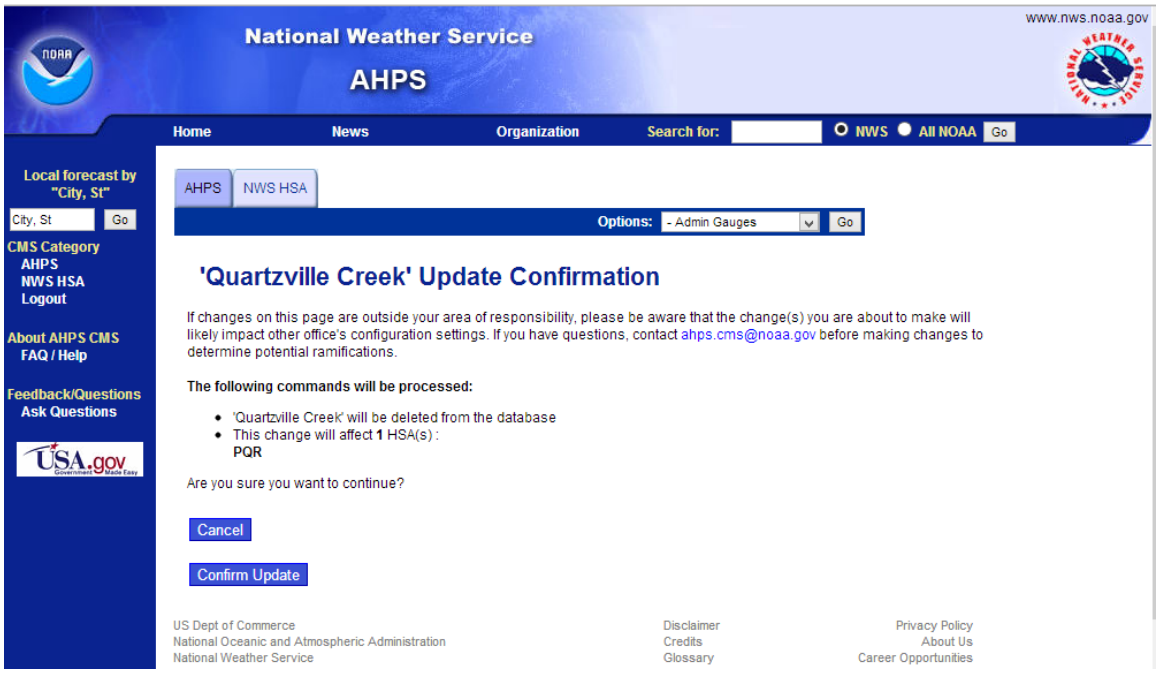
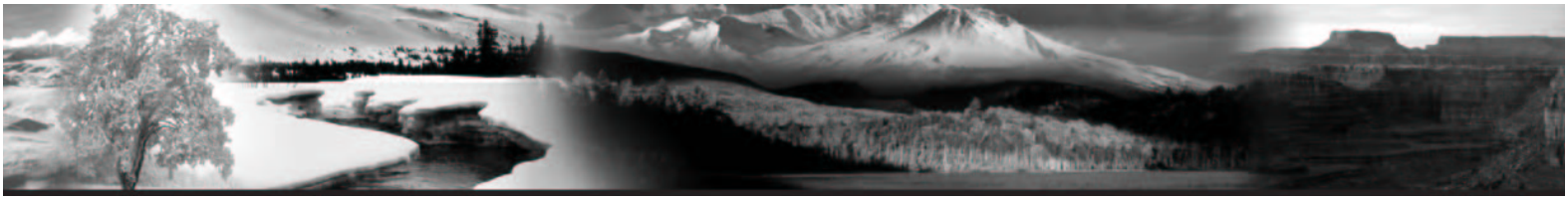


Figure 14: Update/Approval Confirmation Page



Admin Gauges Page

The Admin Gages Page (***Figure 15***) allows users to add/delete gauge(s) for a particular HSA. In the drop down box labeled **HSA**, users will select the HSA they wish to add or delete gauges. If adding a new gauge, users must first select a HSA, then enter the gauge NWSLID within the text box labeled **NWSLID** and click the New button. See (***Figure 16***) below on next page**.**

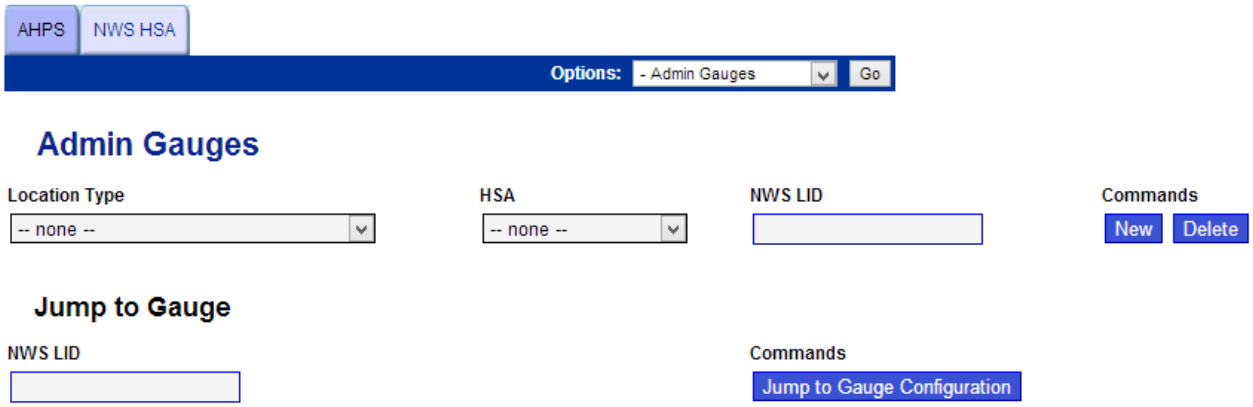
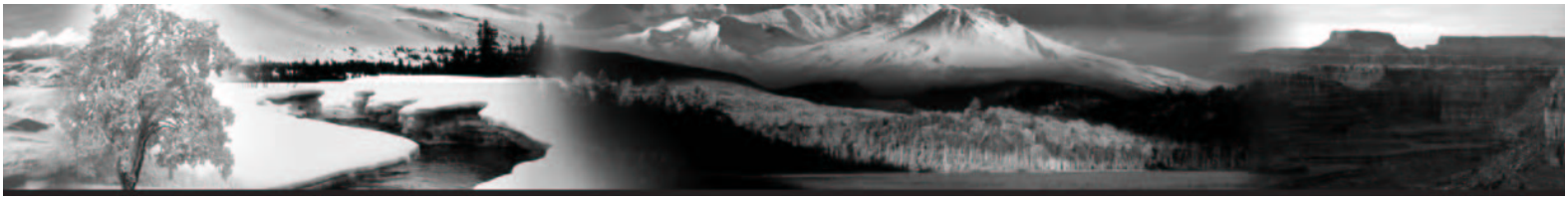


Figure 15: Admin Gauges Page (Example 1)



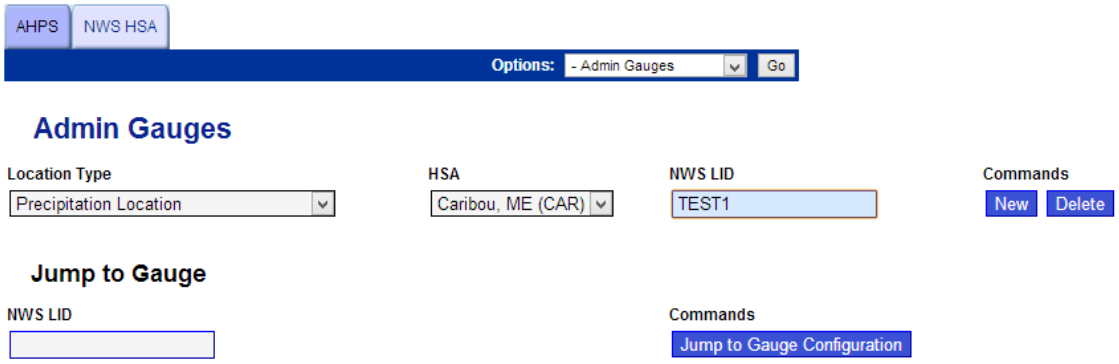
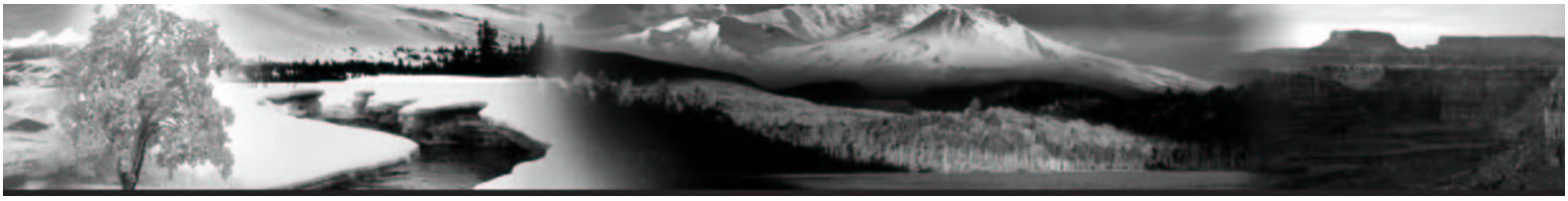


Figure 16: Admin Gauges Page (Example 2)

Once the new gauge has been added it will take users to a new gauge configuration page for this location. A fully configured gauge data page is shown in (***Figures 18a,b,c***). If editing an existing gauge, enter the NWSLID of the gauge in text box labeled **NWS LID** under the **Jump to Gauge** section of the Admin Gauges Page. Then click the "Jump to Gauge Configuration" button to bring up the desired gauge for editing. The ending result should look similar to (***Figures 18a,b,c***).



Gauge Configuration Page

Once a user selects a HSA, in this case HSA (CAR) the NWSLIDs for gauges managed by the HSA are listed in alphabetical order by NWSLID. See (***Figure 17***).

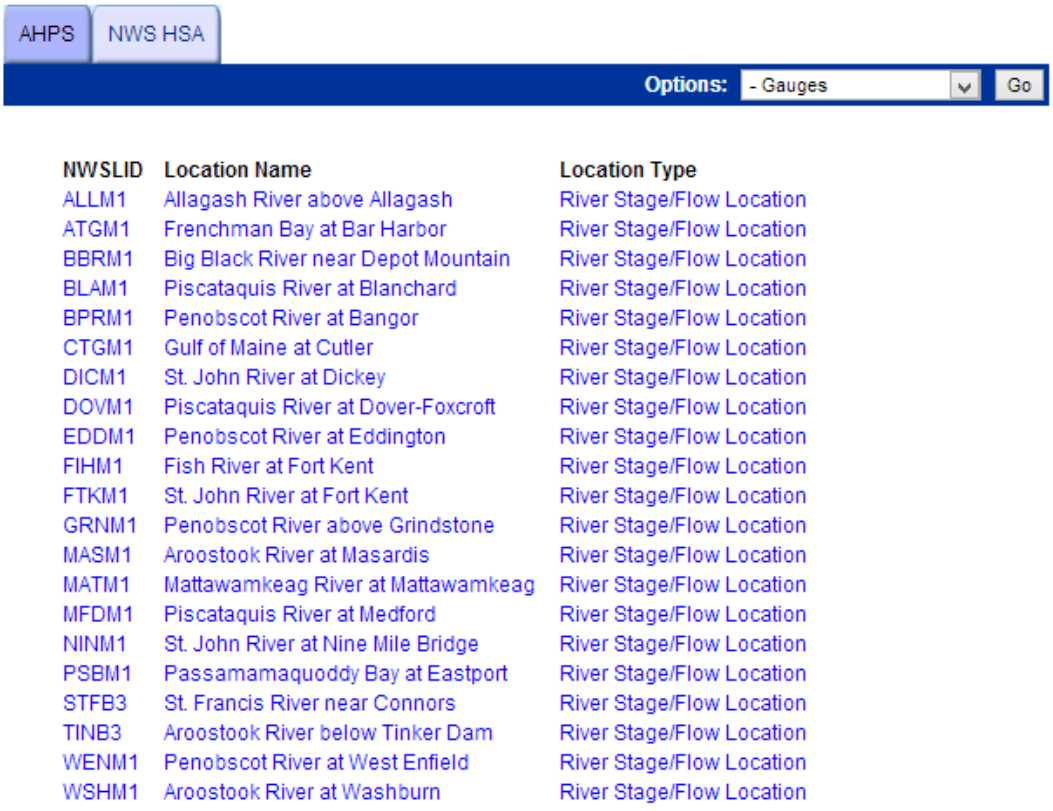
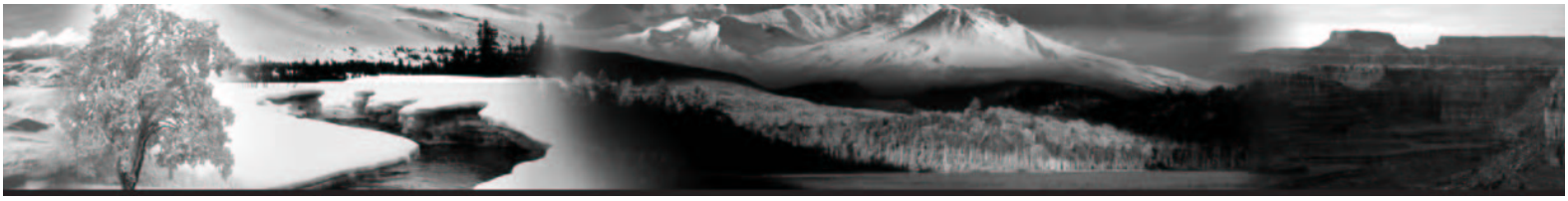


Figure 17: NWSLID Selection Page

Once a NWSLID is selected in (***Figure 16***), a gauge configuration page is displayed (***Figures 17a,b,c***). Which allows the user to input data or select configuration settings for the selected NWSLID.



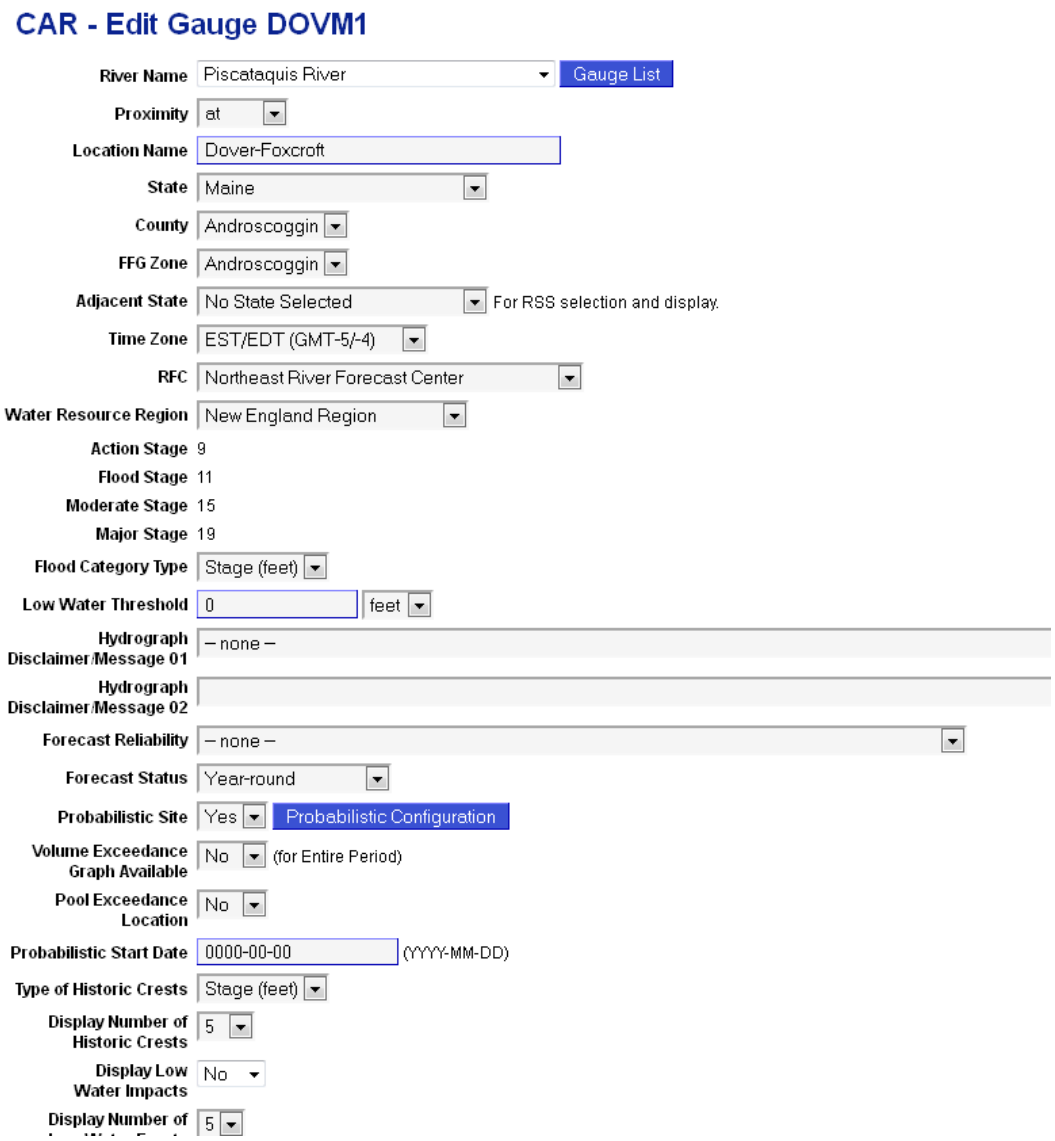
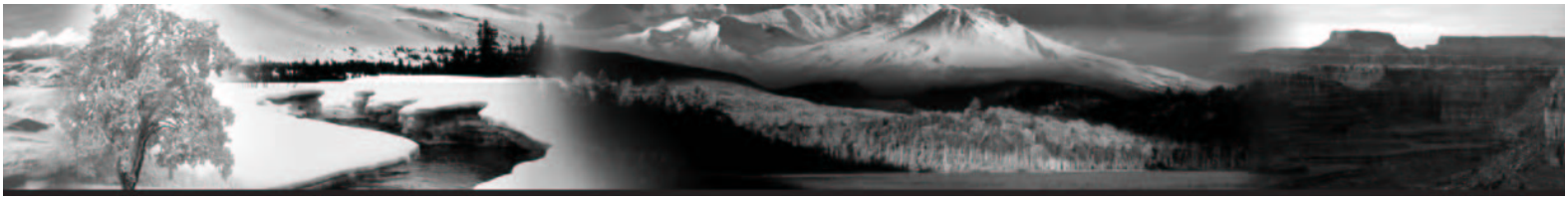


Figure 18a: Gauge Configuration Page (Image 1)



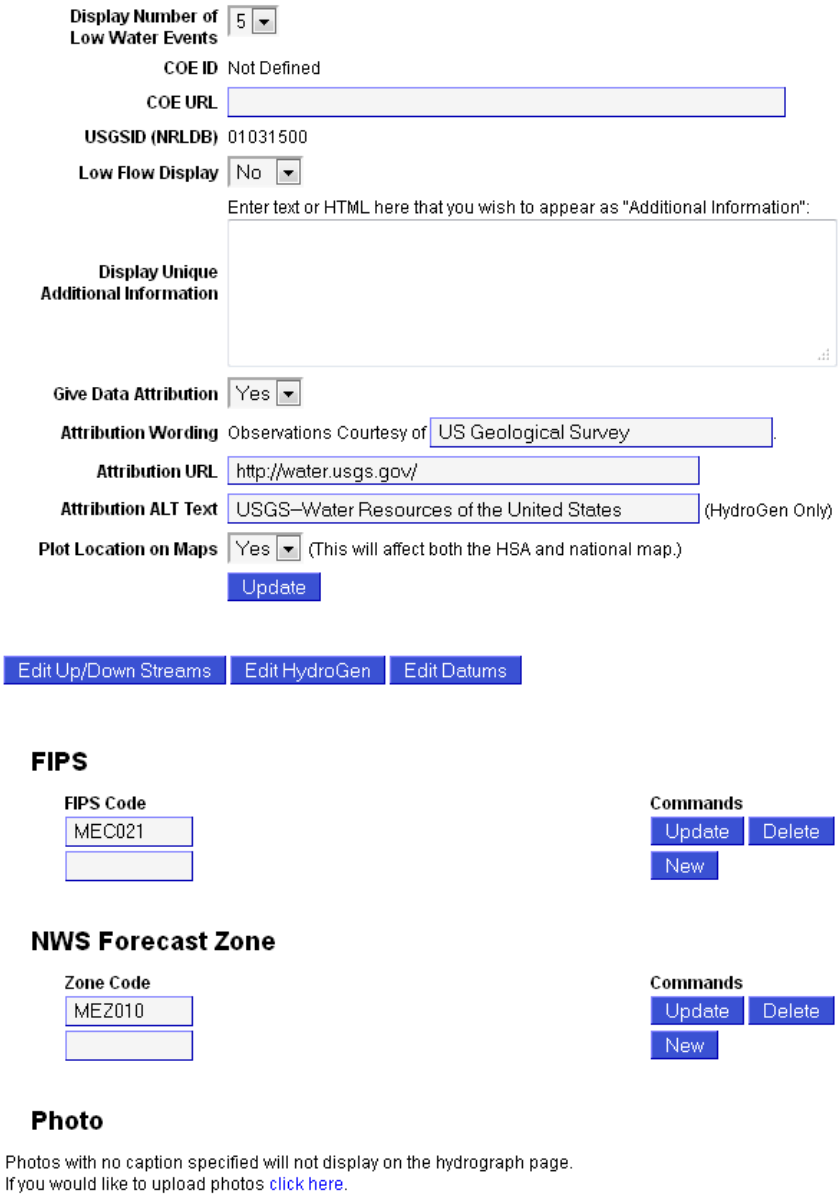


Figure 18b: Gauge Configuration Page (Image 2)

Gauge Map Configuration (Google Maps)

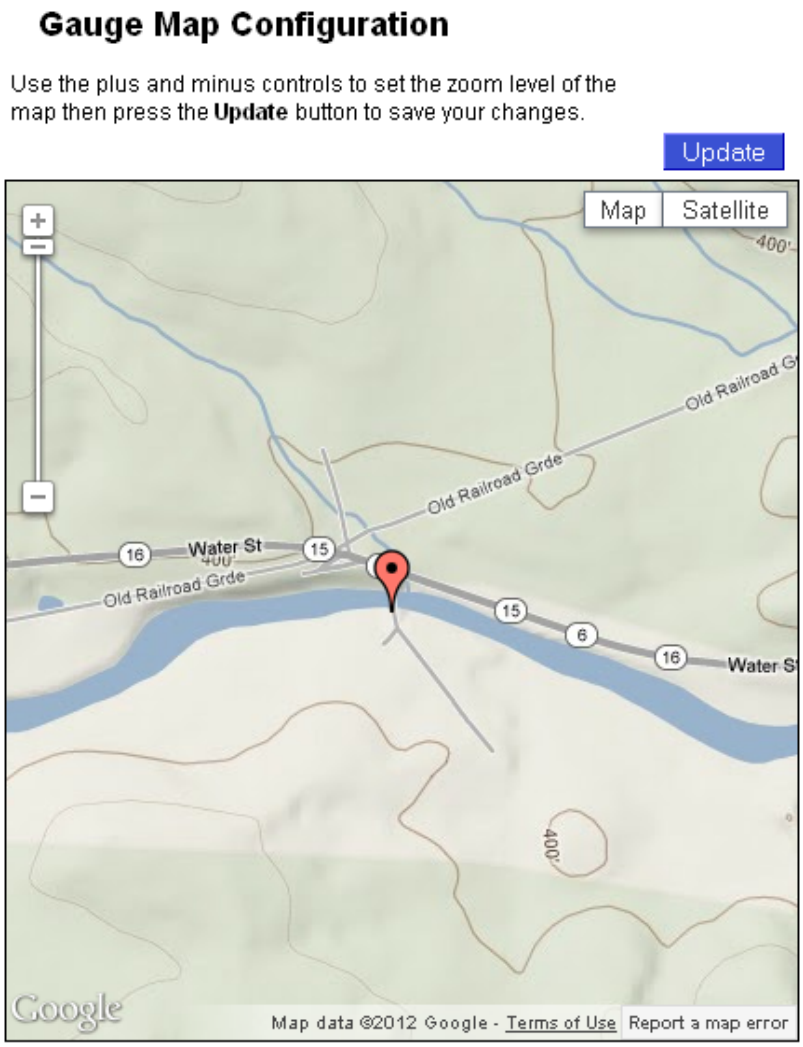
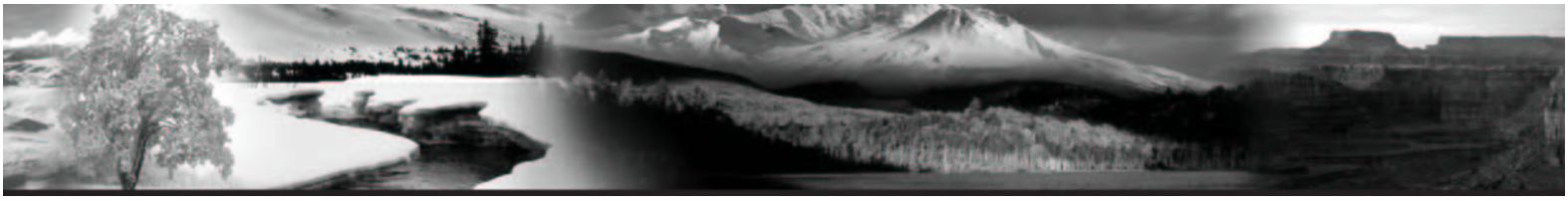


Figure 18c: Gauge Configuration Page (Image 3)

Users are provided with an adjustable zoom level Google Maps interface for the gauge location. Users simply need to click the **+ / -** signs and click Update to set the appropriate level of zoom for the gauge map. The Google Map is always centered upon



the gauge. The gauge latitude and longitude coordinates are driven by AWIPS configuration.

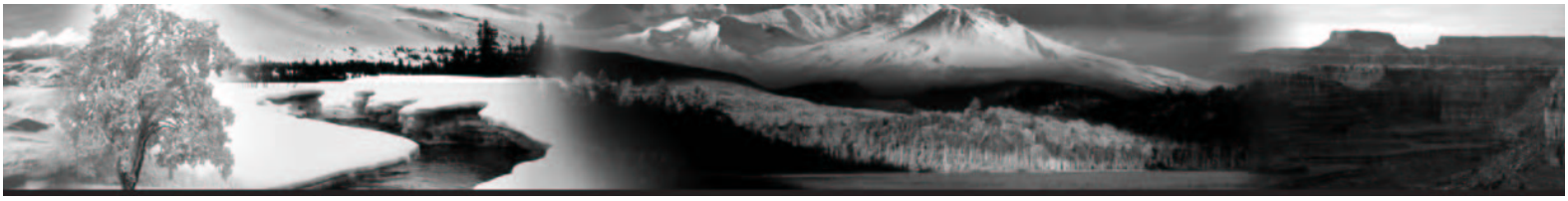
Gauge Configuration Explanations

In this section we will explain what each configuration selection drives. Some items are simple and self-explanatory; others are more complex and direct users to additional pages to complete the configuration. We will cover those items in their own mini-segment(s).

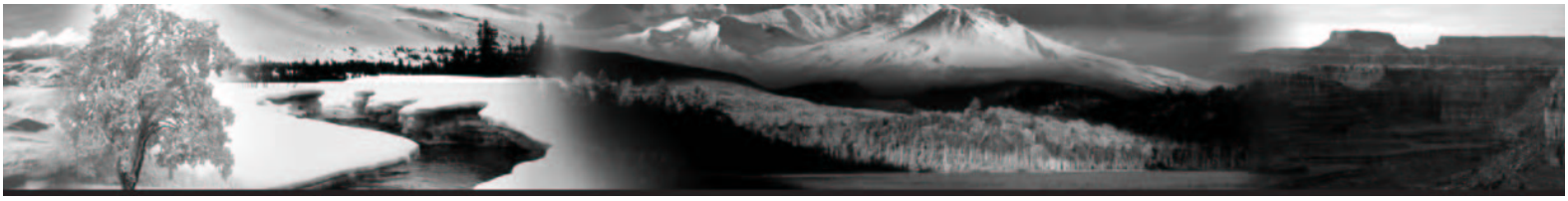
Configuration Item	Remarks
River Name	The name of the water body the gauge should be associated with. **NOTE: This field must be defined for the gauge to be displayed on the Google Maps and for hydrograph generation.**
Proximity	Dropdown selection box. Selectable items are above, at, below, near, and other. ***Special feature (other)***: If the desired proximity is a direction/distance (mileage) from a fixed location, select "other" in the dropdown box and then click on the Update button towards the bottom of the page. This will bring up two additional items. One input box for an integer value for distance and a dropdown box for compass direction. Example for a gauge 10 miles North of the Location Name field: other 10 N Of
Location Name	Plain language name of the gauge location. This is the name the user wants displayed on the AHPS hydrograph page for this location.
State	Dropdown selection box.
County	Dropdown selection box. Auto-populates based on state selection.
FFG Zone	Dropdown selection box. Auto-populates Flash Flood Guidance values based on county selection.
Adjacent State	Choose the Adjacent State for RSS Selection and display.

Configuration Item	Remarks
Time Zone	Dropdown selection box. Select TZ for gauge location.
RFC	Dropdown selection box. Choose appropriate River Forecast Center for gauge.
Water Resource Region	Dropdown selection box. Choose appropriate Water Resource Region for gauge.
Action Stage/Flow	Stage in feet, volume flow (cfs), or enter zero (0) if undefined. This value is updated each day via the NRLDB database.
Flood Stage/Flow	Stage in feet, volume flow (cfs), or enter zero (0) if undefined. This value is updated each day via the NRLDB database.
Moderate Flood Stage/Flow	Stage in feet, volume flow (cfs), or enter zero (0) if undefined. This value is updated each day via the NRLDB database.
Major Flood Stage/Flow	Stage in feet, volume flow (cfs), or enter zero (0) if undefined. This value is updated each day via the NRLDB database.
Flood Category Type	Toggle between **Flow** and **Stage** types for the flood category.
Low Water Threshold	Input the Upper Limit for Low Water (options) **Feet, KCFS** or **CFS**. If defined, this value is represented on the hydrograph as a brown tint from the defined threshold and down. This value may be negative or zero (0). To disable, enter a blank value. **NOTE: The units must match the observation data units of the hydrograph.**
Hydrograph Disclaimer/Message 01	Dropdown box selection. If a disclaimer/ message is selected, it will display below the hydrograph for the selected location.
Hydrograph Disclaimer/Message 02	Dropdown box selection. If a disclaimer/ message is selected, it will display below the hydrograph for the selected location.
Forecast Reliability	Dropdown box selection. If a forecast reliability message is selected, it will display below the hydrograph for the selected location.
Volume Exceedance Graph Available	Dropdown selection box (Yes/No). This setting is used to add the volume exceedance icon to the hydrograph page for the entire period exceedance type. **NOTE: This feature only displays when**

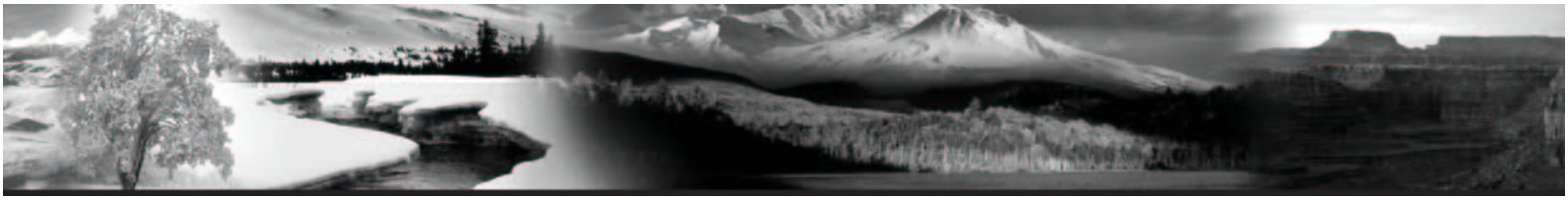
Configuration Item	Remarks
	a site has been selected as a Probabilistic Site. * *If Volume Exceedance is set to "YES", then Probabilistic Site MUST be set to "YES".* *This probabilistic data type is not available for all locations**.*** *Contact your RFC if you question that your HSA uses this type of data.*
Forecast Status	Dropdown selection box. Gives description of what type of forecast is available for gauge location. Item displays below the hydrograph for the selected location. 1. **No routine –** Graphical forecasts are not available for {Location Name}. **During times of high water, forecast crest information can be found in the <u>text products</u>.** 2. **Navigation Season -** Forecasts {Location Name} are issued routinely during the navigation season, and as needed at other times of the year. 3. **Summer-only** - Forecasts for {Location Name} are issued routinely during the warm season, and as needed at other times of the year. 4. **Year-round** - Forecasts for {Location Name} are issued routinely year-round. 5. **High Water** - Forecasts for the {Location Name} are issued as needed during times of high water, but are not routinely available. 6. **Data Point -** Forecasts are not available for {Location Name}. Only observed stages are available for this point.
Probabilistic Site	Dropdown selection box (Yes/No). This feature turns on the probabilistic icons on the hydrograph page for the selected gauge. Also, provides the ability to select what type of Probabilistic Data to display.



Pool Exceedance Location	Dropdown selection box (Yes/No). When set to "**Yes"**, the location displays exceedance values as if it were a reservoir instead of a stream/river. **NOTE: This feature only displays when a site has been selected as a Probabilistic Site.**
Type of Historic Crests	Dropdown selection box. "Stage (feet)" or "Flow (cfs)". Defines what units Historical Crests are displayed in.
Display Number of Historic Crests	Dropdown selection box. Number of historical crest to be displayed on hydrograph page. (0-10)
Display Low Water Impacts	**Yes/No dropdown.** Toggle for the Display of Low Water Impacts (Yes or No). When updated, a button labeled "Edit Impacts" will display.
Display Number of Low Water Events	Dropdown selection box. Number of historical low water events to be displayed on hydrograph page. (0-5)
COE ID	Corps of Engineers (COE) gauge location ID. This value is updated each day via the NRLDB database.
COE URL	The Corps of Engineers (COE) URL for the selected gauge location. This will link users to that gauge page.
USGSID (Populated via NRLDB Database)	U.S. Geological Survey (USGS) gauge location ID. If available an attribution statement for the USGS will be displayed above the hydrograph. This value is updated each day via the NRLDB database.
Display Unique Additional Data	Enter text or HTML here that you wish to appear as "Additional Information" below the impact statement on the hydrograph page. This item is configurable per gauge location.
Give Data Attribution	Dropdown selection box, it is a **Yes/No** selectable item.
Attribution Wording	This field is used for the organization name(s) that attribution should be given to. It is limited to 32 characters due to space constraints on the HydroGen hydrograph image. The AHPS code will prefix the phase "Observations Courtesy of" prior to organization attribution wording input. This is a mandatory item if "Give Data Attribution" is set to "Yes".
Attribution URL	This is the URL the attribution wording should point to. If a website that is not a .gov or .mil domain is used, users will be directed to a "You



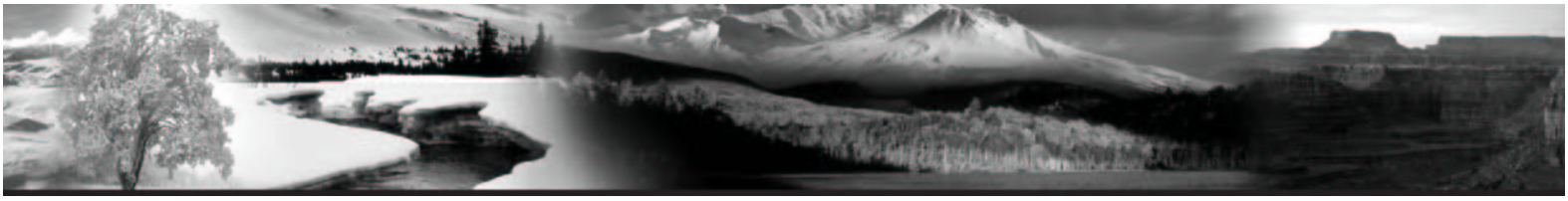
Attribution URL	This is the URL the attribution wording should point to. If a website that is not a .gov or .mil domain is used, users will be directed to a "You are now leaving NWS" jump page before proceeding to the external website. The "Attribution URL" is an optional item.
Attribution ALT Text (HydroGen Only)	This is an optional ALT tag text input field. If not defined, the AHPS code will use the wording from the "Attribution Wording" field for the ALT tag.
Plot location on Maps	Yes/No dropdown. If set to "NO", this control will cause the gauge marker to be removed from all



Probabilistic Configuration

Once users click the "Probabilistic Configuration" button they will be directed to a page where they can select what type of probabilistic information they would or would not like to include on their gauge pages; these include **Display Stage**, **Display Flow** and **Display Volume**. Users will notice in ***Figure 19*** below there are a series of selection boxes that can be set in any possible combination based upon the user's preference or situation. When users are finished with their configuration changes they simply need to click Update to apply the changes. Users can then chose to either go back to the Gauge Edit Page by clicking Return to Gauge Editor or chose to navigate somewhere else within the AHPS CMS using the "Options" dropdown menu.

Figure 19: Probabilistic Site Configuration Options



Low Water Impacts

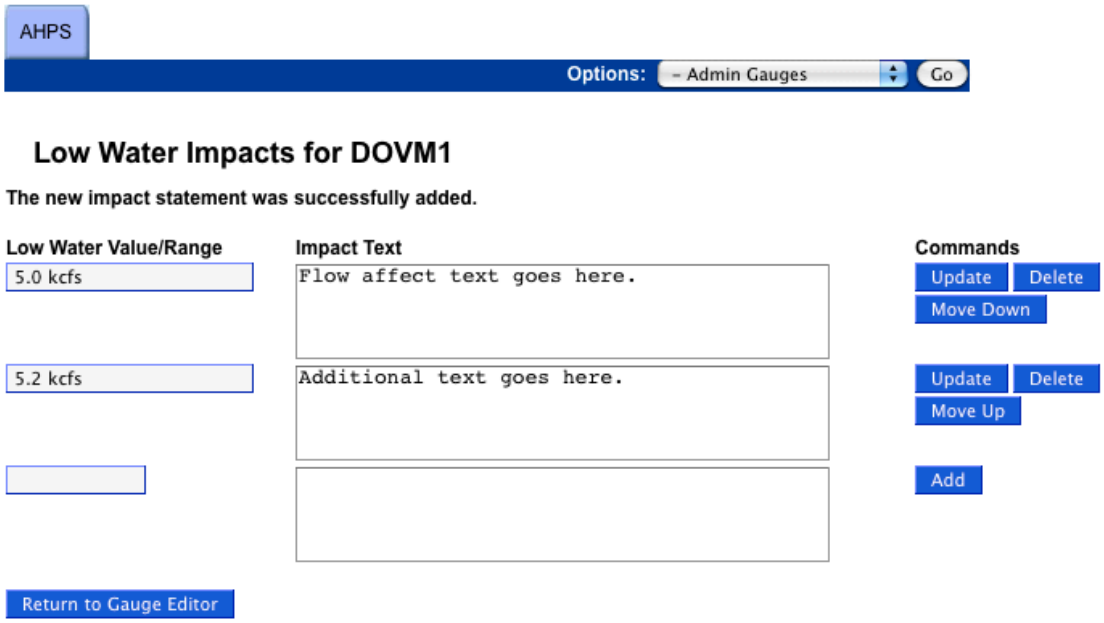
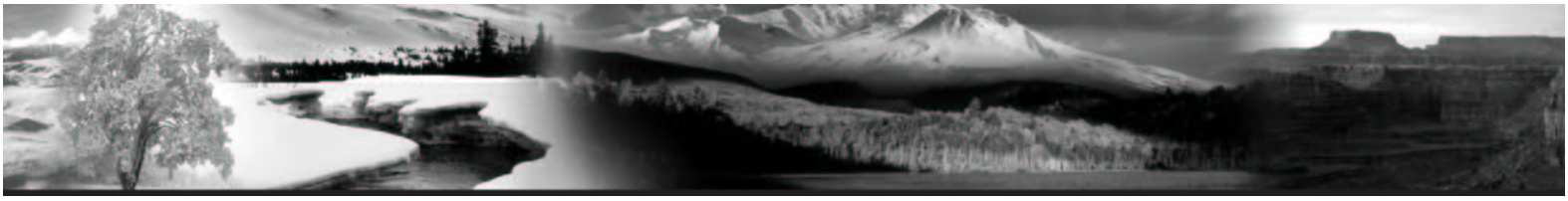


Figure 20: Low Water Impacts Edit Page

(***Figure 20***) Shows the "Low Water Impacts" edit page. When users select "Yes" to display Low Water Impacts within the dropdown selection box and Update is clicked, they will be presented with a button Edit Impacts. Once users click this button, they will be directed to the page where they can add different Low Water Values and the Impact text that goes along with that value or range. The can be sorted manually via the buttons located to the right of the impact text box. These items can be deleted and/or updated after the text has been edited on existing values. When users have completed their edits on this page they simply need to click Return to Gauge Editor to return back to the "Gauge Edit" page.



Data Attribution

The AHPS CMS interface has been modified to allow NWS personnel to customize the "Observations Courtesy of" attribution organization wording, URL, and ALT tag text on the hydrograph page for both HydroGen and Rivdat type hydrographs. A new configuration item called "**Give Data Attribution**" has been added to the gauge configuration page with a default setting of "No". To ensure that current attribution to US Geological Survey (USGS) will not be lost once this new feature goes into production, any gauge with a USGS ID defined will have the new CMS fields populated with USGS attribution settings. The selection boxes that are used to change this can be seen below in **(*Figure 21)***.

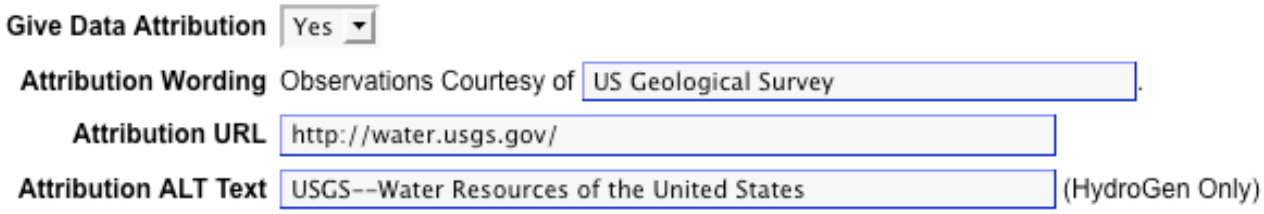


Figure 21: Data Attribution Settings

Note: This information will only be displayed when "Yes" is selected for the option "Give Data Attribution".

Once changes are made to configuration data, users will need to click on 

for the section they have modified. This will save the modification to the configuration database.

Edit Up/Down Stream

This page allows users to enter into the AHPS CMS the relationship a particular gauge has with other gauges around it. With this page users can set both a primary and a secondary gauge that is either up or down stream in relation to this gauge. If a gauge has either two up or down stream gauges a new fork arrow will be visible on the Hydrograph page.

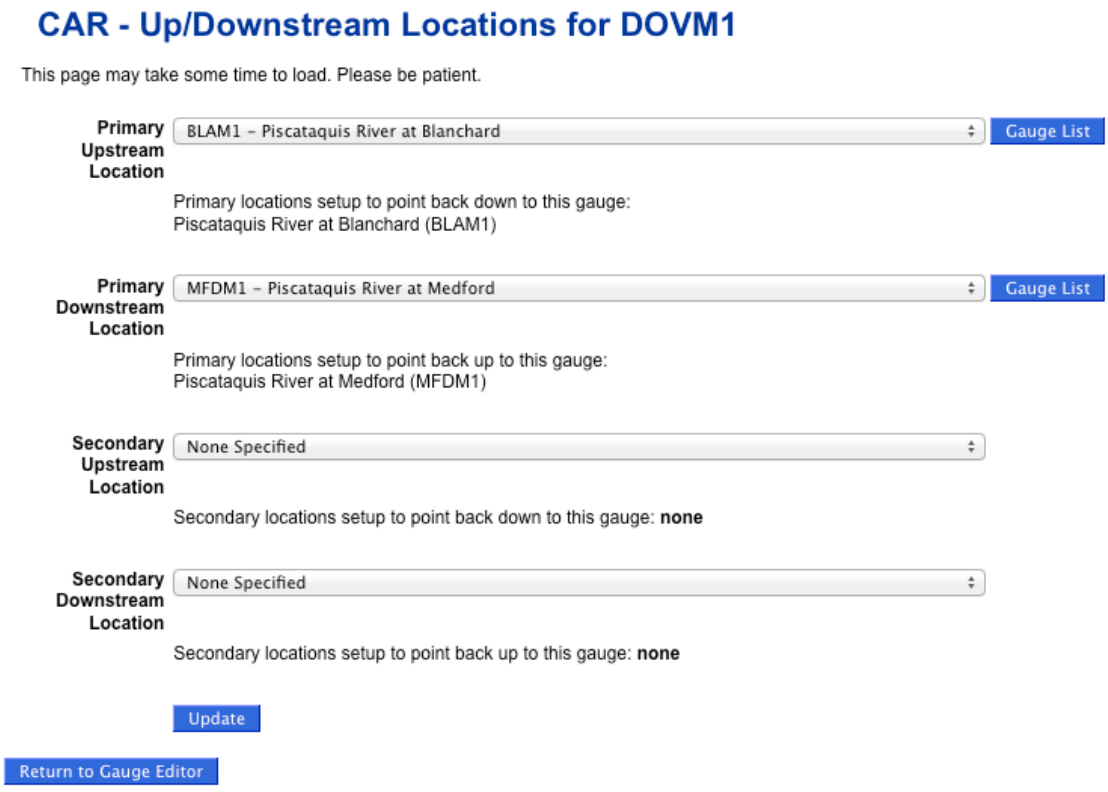
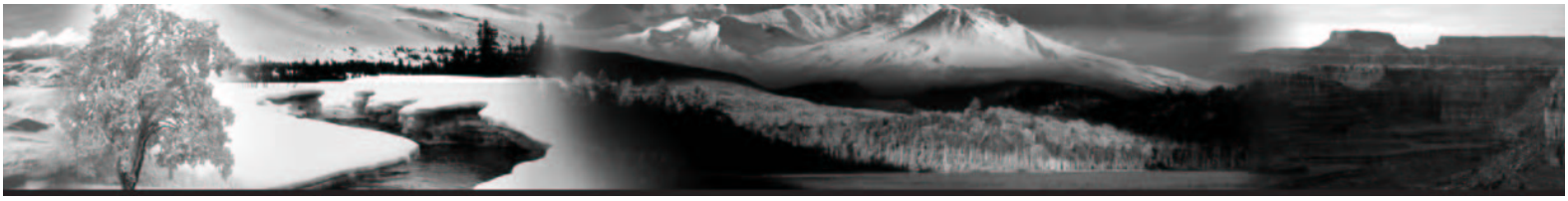


Figure 22: Edit Up/Down Stream Gauge Options

The "Gauge List" button will show the gauge you have selected, along with the gauges found in order above and below it, starting upstream and working its way down.



HydroGen (Gauge Configuration Page)

When users click on the "Edit HydroGen Data" from the "Edit Gauge" interface, they will be taken to the following page:

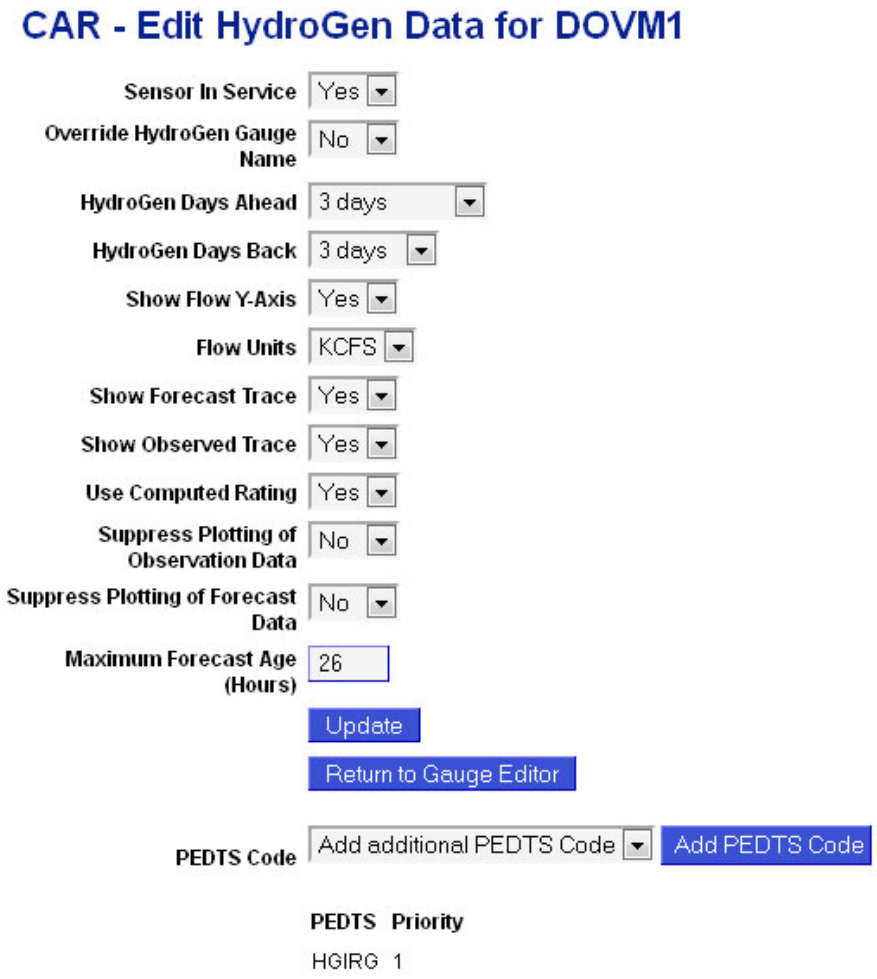
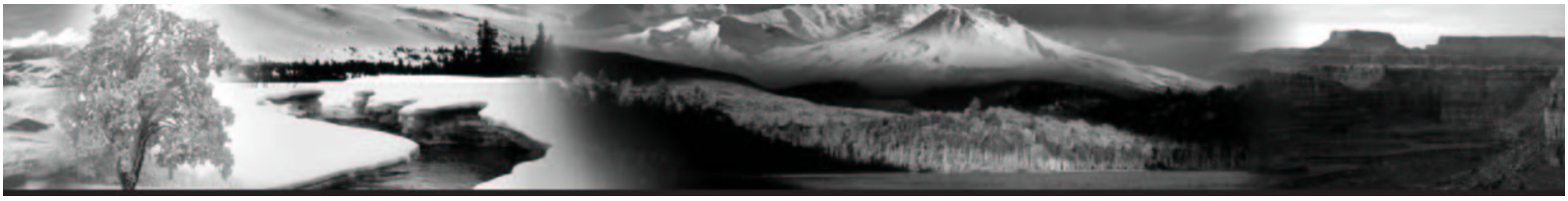


Figure 23: HydroGen Configuration

HydroGen is suite of software programs that collect data from a database and prepare hydrograph graphics for the web. The items in ***Figure 23*** are used to configure this software suite.

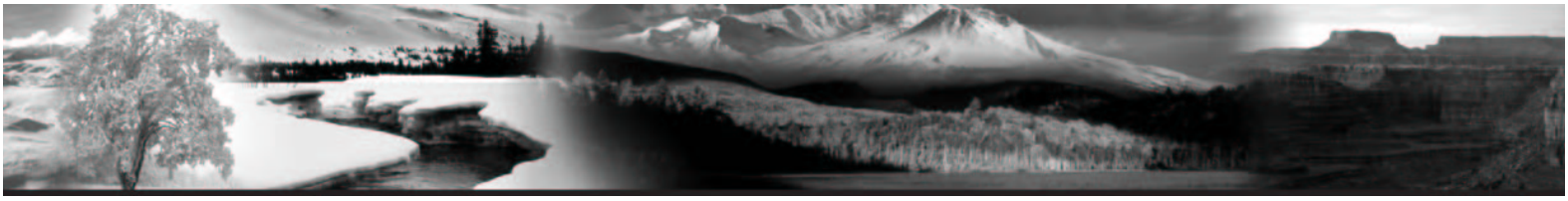
Configuration Item	Remarks
Sensor In Service	**Yes/No** dropdown. If set to "No", it will not colorize the map



	icons for this location based upon OBS or Forecast data. Will only display a "black" icon.
Override HydroGen Gauge Name	**Yes/No** dropdown. If set to "Yes", a text input will display once the page has been saved. Users can override the name of the gauge as it appears in the Hydrograph images.
HydroGen Days Ahead	Dropdown menu with values from **0 days** through **14 days** and **All (days) available**. Will display selected days of forecast data if available. **NOTE: This value drives the forecast slider visible on the State, RFC, WRR and HSA forecast pages as well as truncating the visible data on the Hydrographs, Tabular Data, XML, and RSS feeds to all display data in a consistent way.**
HydroGen Days Back	Dropdown menu with values from **0 days** through **10 days**. Will display selected amount of days of observed data if available. **NOTE: This value truncates the visible observed data on the Hydrographs, Tabular Data, XML, and RSS feeds to all display data in a consistent way.**
Show Right-hand Y-Axis Label	**Yes/No** dropdown. If set to "Yes", show correlating secondary value label on the right-hand side of the hydrographs.
Flow Units	Dropdown menu. Select whether to display flow in CFS or KCFS.
Show Forecast Trace	**Yes/No** dropdown. Connect the plotted forecast data points with a line.
Show Observed Trace	**Yes/No** dropdown. Connect the plotted observation data points with a line.
Use Computed Rating	**Yes/No** dropdown.
Suppress Plotting of Observation Data	**Yes/No** dropdown. Do not plot observed data on the hydrograph. **NOTE: If this is set to "YES" the gauge will not be plotted on any of the observed data maps (national, WRR, State, RFC or HSA).**
Suppress Plotting of Forecast Data	**Yes/No** dropdown**.** Do not plot forecasted data on the hydrograph. **NOTE: If this is set to "YES" the gauge will not be plotted on any of the forecasted data maps (national, WRR, State, RFC or HSA).**
Maximum Forecast Age (Hours)	**Number input field.** Maximum hours between issuances of forecast products. If this threshold is exceeded, the forecast data will be deemed "old" and display as such.

PEDTS Data Failover

Users can select multiple PEDTS types (if available) and prioritize these in how it is used to display the data within the Hydrograph. If data is not received for the PEDTS currently in use within the set "Hours" value, it will fail over to the next priority PEDTS. Should a failover happen, an e-mail is sent to the gauge administrators with instructions on how to fix it.



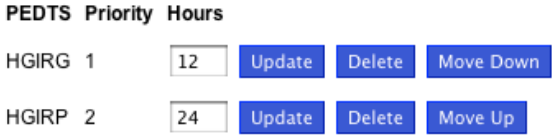


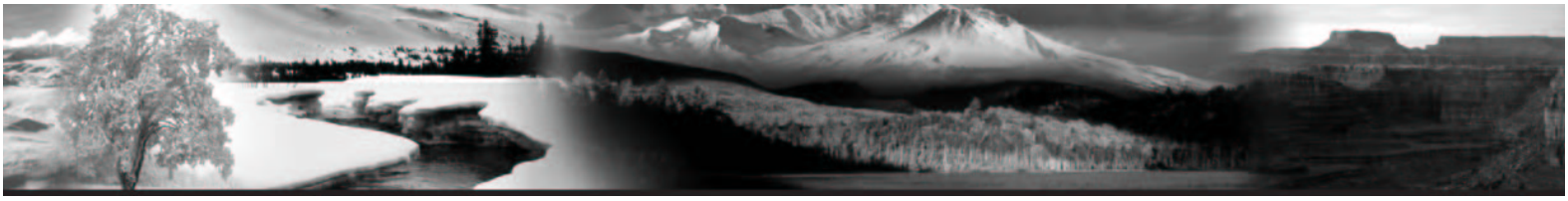
Figure 24: PEDTS Failover Configuration

The NRLDB (National River Location Database) Data for a gauge is also displayed on the Edit HydroGen Page. These values are updated daily by the NRLDB and cannot be edited by CMS users or admin.

Hydrologic data (such as forecasts, latitude, longitude, and flood category heights) is collected from NWS-serviced Weather Forecast Offices and stored in one centralized location – the NRLDB – to better facilitate and quantify benefits provided by NWS whenever such information is needed for determining how to distribute support or when further research guidance is needed.

Terms and abbreviations used within the NRLDB Section:

HG Station: HydroGen Station – Heading for cluster of data. Settings established for the station within the NRLDB.
PE: Physical Element – Abbreviation for physical metrics by which data can be established (water volume depth, gate openings total, et al.)
TS: Type Source – SHEF type sources.
FCSTTS: Forecast Type Source
Ratings: A metric of how much water is being discharged (discharge) in Cubic Feet per Second (CFS) when gauges measure a specific water depth (Stage (feet)).
Flood categories: Stage depths at each category of flood, from "Action" through "Major" levels
Crests: Historical records of greatest flow and depth river crests for location.
Low Water Records: Historical records for lowest values reported for river beds.
Flood Impacts: How flooding will affect the surrounding land at various stage heights or flow values.
Location: General information for the site, including latitude, longitude, US Geological Survey ID number, Army Corps of Engineers ID number, Horizontal datum, Zero datum, and River Forecast Center in which the site is located.

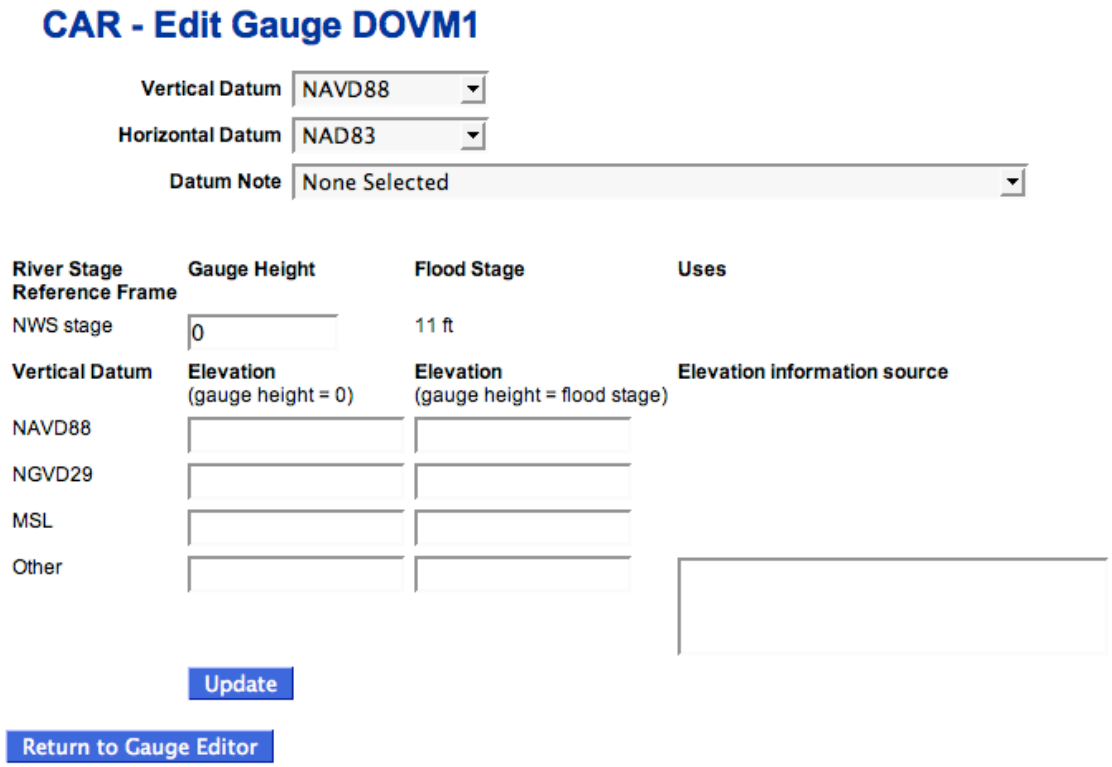


Edit Datums

Users have the ability to input reference datums for each gauge. The Edit Datums page has the following options: Vertical Datum, Horizontal Datum, and Datum Note.

Vertical Datum - Toggle that can be either none, North American Vertical Datum of 1988 (NAVD88) or National Geodetic Vertical Datum of 1929 (NGVD29).
Horizontal Datum – Toggle that can select North American Datum of 1983 (NAD83)/World Geodetic System of 1984 (WGS84), North American Datum of 1927 (NAD27), Old Hawaiian Datum of 1913 (OHD1913), Puerto Rico & the U.S. Virgin Islands (PRVI), or Other.
Datum Note – Dropdown box with different notes to be displayed below the hydrograph.

There is also a table that allows you input the NWS stage as well as the vertical datum elevation information.



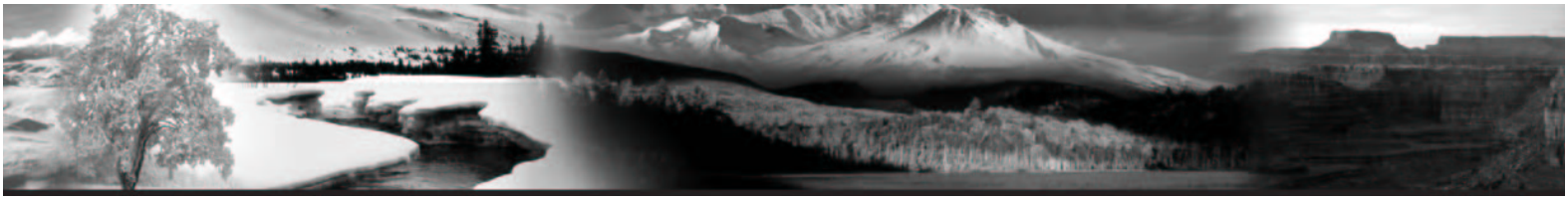
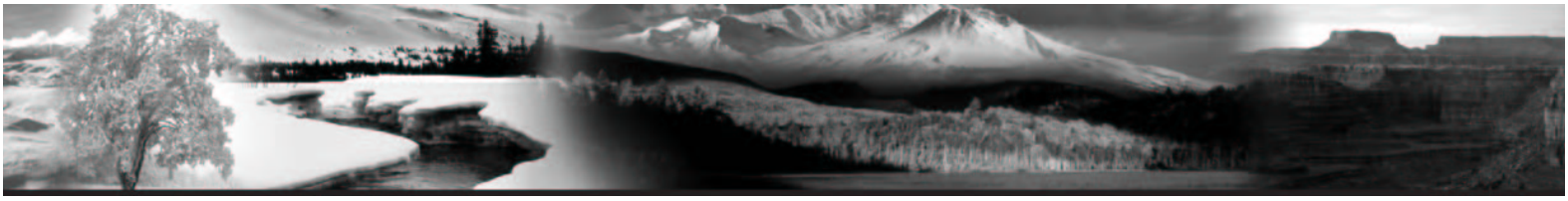


Figure 25: Edit Datums Gauge Options



FIPS

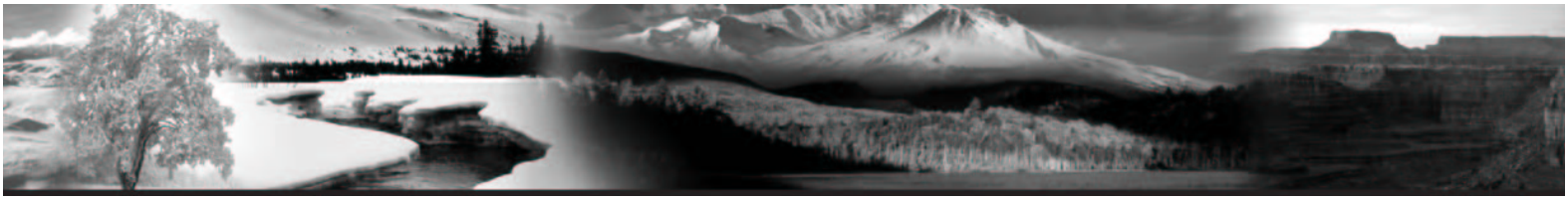
The FIPS Codes shown here are 5-digit codes that are assigned to each county. The first two digits are for the State and the last three identify the County, or county equivalent. So, each State has its own 2-digit number, and each County within the state has its own 3-digit number, which are combined into a 5-digit number to uniquely identify every US County. For Example: Georgia's state number is 13, and Bryan county, GA is 029, so Bryan county's FIPS code is 13029. FIPS Codes are easier to handle in information systems than are county and state names. Gauges may be associated with more than one FIPS code.

For more technical details:
Federal Information Processing Standards Publications (FIPS PUBS) are issued by the National Institute of Standards and Technology (NIST) after approval by the Secretary of Commerce pursuant to Section 111 (d) of the Federal Property and Administrative Services Act of 1949 as amended by the Computer Security Act of 1987, Public Law 100-235.

Federal Information Processing Standard (FIPS) 6-4, *Counties and Equivalent Entities of the U.S., Its Possessions, and Associated Areas -- 90 Aug 31* , provides the names and codes that represent the counties and other entities treated as equivalent legal and/or statistical subdivisions of the 50 States, the District of Columbia, and the possessions and freely associated areas of the United States. Counties are considered to be the "first-order subdivisions" of each State and statistically equivalent entity, regardless of their local designations (county, parish, borough, etc.).

For a list of FIPS codes, go to
http://www.nws.noaa.gov/mirs/public/prods/maps/cnty_fips_list.htm

Figure 26: NWSCMS interface options for editing a gauge's FIPS settings



NWS Forecast Zone

NWS Forecast Zones are areas between weather breakpoints – locations used to define and specify endpoints of a region as discussed by meteorologists. The NWS Forecast Zones are combinations of specific latitude and longitude coordinates used in conjunction with geographical features, such as mountain ridges or basins. Gauges may be associated with more than one Forecast Zone.

Forecast Zone codes are 5 alphanumeric characters. The first two alpha characters are the state postal abbreviation in which the zone is located. The three following numbers correlate to the particular zone's relative location within its state, starting in the northwestern corner, going south until it hits the state border, then starting again in the northern half east of the first zones.

For a list of NWS Forecast Zone codes, go to
http://www.nws.noaa.gov/mirs/public/prods/reports/pfzone.htm

Figure 27: NWSCMS interface options for editing a gauge's Forecast Zone

Gauge Photo Management

Photos for gauge sites will be uploaded and handled via special site hosted on Eastern Region's Intranet. A link will be provided within the AHPS CMS interface to connect to this site. Users can connect to the tool by clicking the link "click here" highlighted below in red. Once a location has photos uploaded, users can use this interface to edit the captions for the photographs and move them up or down in priority.

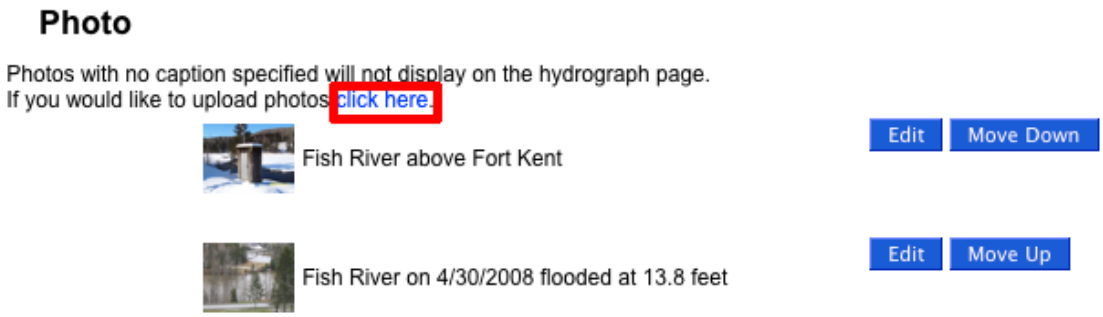


Figure 28: Gauge Photo Management Interface Link

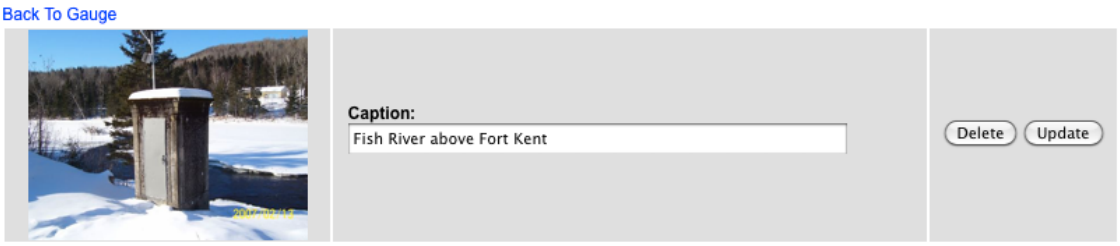
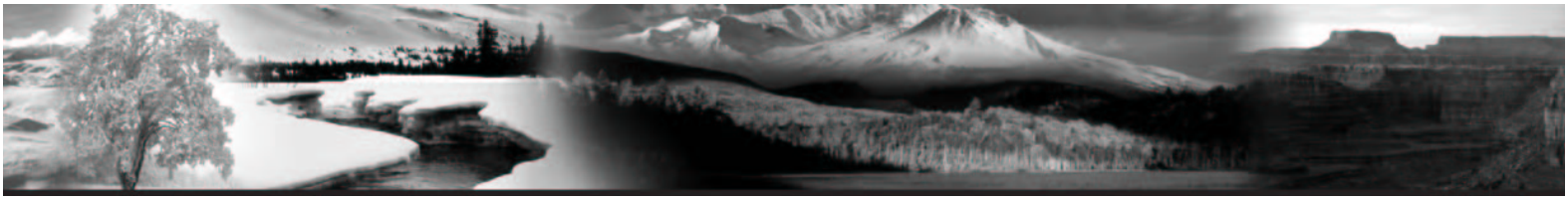


Figure 28a: Gauge Photo Editor Tool

Once photos for gauge sites have been uploaded via the ER hosted tool, users can edit the caption information by clicking the Edit button located out to the right of the photo. Once on the page pictured above in ***Figure 28a***, users can edit the photos caption or delete the photo outright. Once users have finished the needed updates to the caption the will need to click "Update" to complete the changes. **See Appendix-C for full documentation.**



Radar Links

With this release of the AHPS CMS users now have the ability to link to multiple radar sites. To do this, users will select Radar Links from the CMS Dropdown Menu. Once users have selected this option they will see a page similar to ***Figure 29a.*** Users can link to as many radar sites as they would like, users can click the "New" button and an entry will appear that can be filled in with the new link's information. Once users have completed this they can then view the new radar links on the Blue Left-hand Navigation side of the AHPS page. (***Figure 29b***). Links can also be updated or deleted as well.

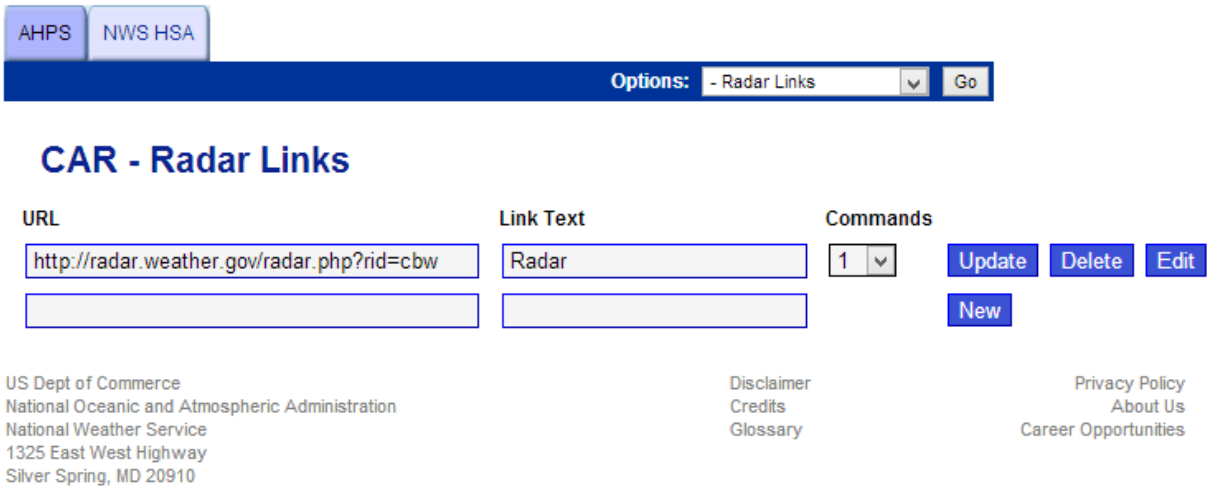
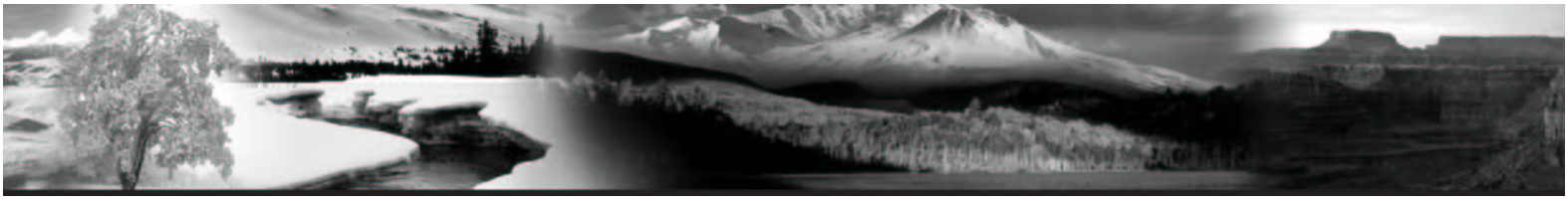


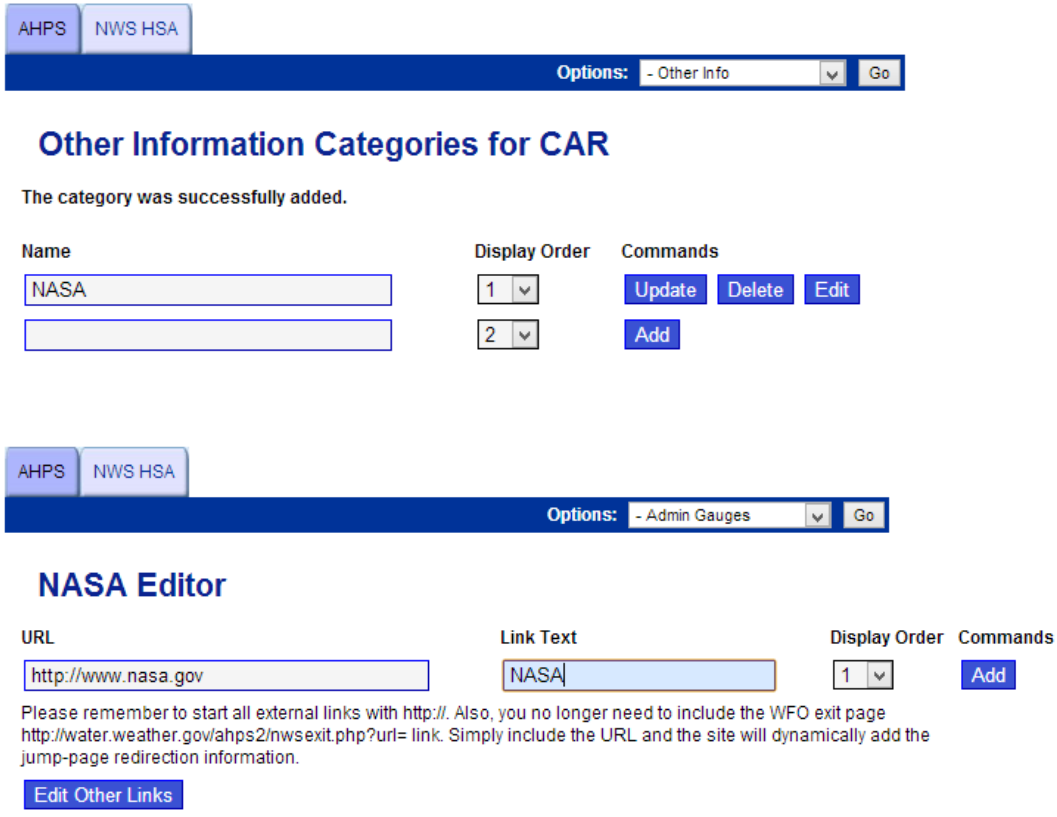
Figure 29a: Radar Links

Figure 29b: Radar Links in Action



Other Information

Users have the ability to input custom entries to the Other Information page. To do this, users will select Other Info from the CMS Dropdown menu. ****Note in order for the information to be seen, the "Display Other Information" toggle needs to be set to "Yes" on the HSA configuration page.** Once loaded, users will be presented with a page similar to the one below (***Figure 30***). Here users can input new information, delete or update current information. First users will create the "Category". Update, Delete, and Edit options will appear next to the item. If edit is clicked, users will be taken to a page where they can input the links for this category. Once the information is added and Update is clicked, it can then be viewed on the AHPS page by clicking on the Other Information tab.



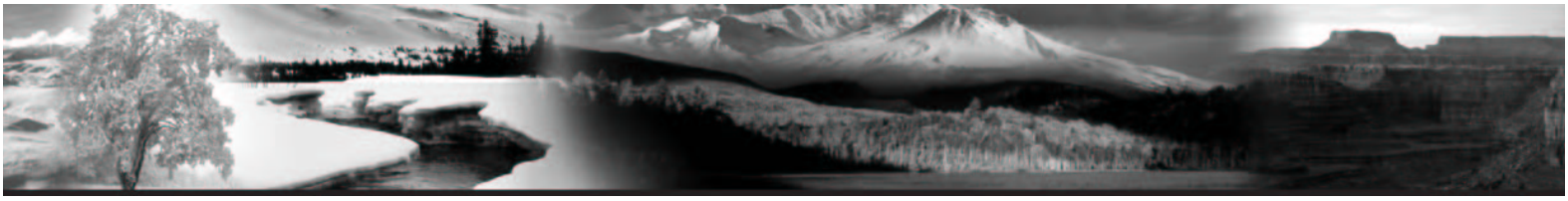
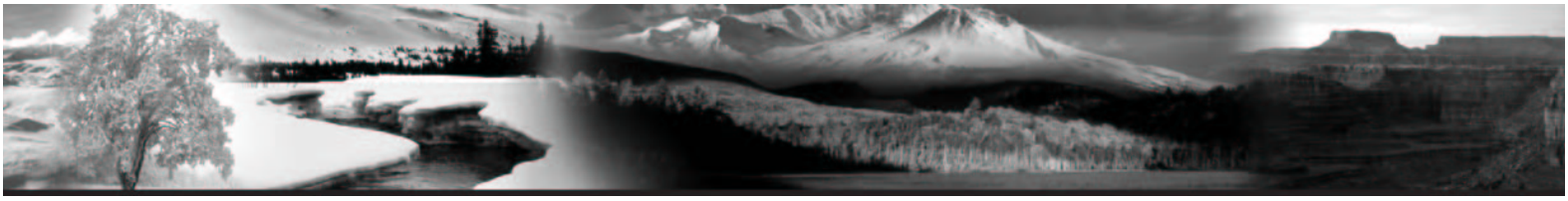


Figure 30: Other Information Page Editor

Dropdown Webpage Navigation Page

The Dropdown Navigation Page (***Figure 31***) allows users to manage the name and order of the water body(s) listed in the dropdown list below the HSA map and hydrographs AHPS web pages. Click on Edit to associate a river(s) with the navigation name. If more than one water body is added under a navigation name, the dropdown box on the AHPS web page will automatically add the words (and Tributaries) to the navigation name. Water bodies can be consolidated into groups of water bodies under one navigation listing. This can help reduce the number of dropdown boxes to the right of the HSA map and hydrographs and improve the usability of AHPS HSA navigation. See (***Figure 32***).



AHPS | NWS HSA

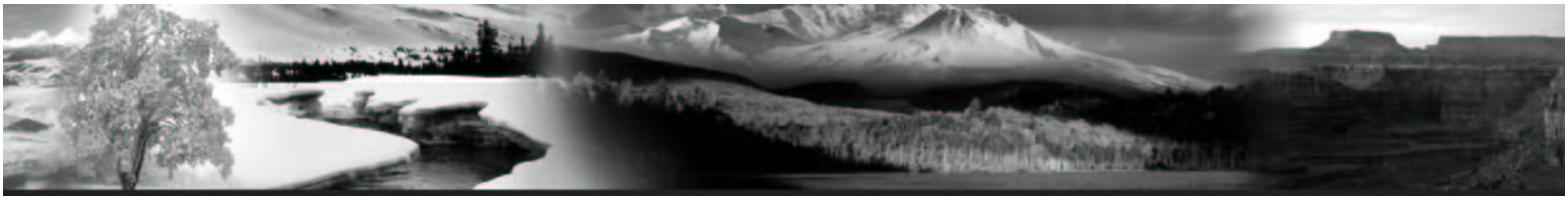
Options: - Dropdown Navigation Go

CAR - Webpage Dropdown Navigation

This page allows users to manage the name and order of rivers listed in the dropdown list below the HSA map and hydrographs. Click on the edit button to associate a river(s) with the navigation name. If more than one water body is added under a navigation name the dropdown box on the AHPS web page will automatically add the words (and Tributaries) to the navigation name.

Notice: This page is only for adding new rivers. To configure them, Click here.

Navigation Dropdown Name	Display Order	Commands
St. John River	1	Update Delete Edit
Big Black River	2	Update Delete Edit
Allagash River	3	Update Delete Edit
Fish River	4	Update Delete Edit
Aroostook River	5	Update Delete Edit
Penobscot River	6	Update Delete Edit
Mattawamkeag River	7	Update Delete Edit
Piscataquis River	8	Update Delete Edit
Tide Gauges	9	Update Delete Edit
		New



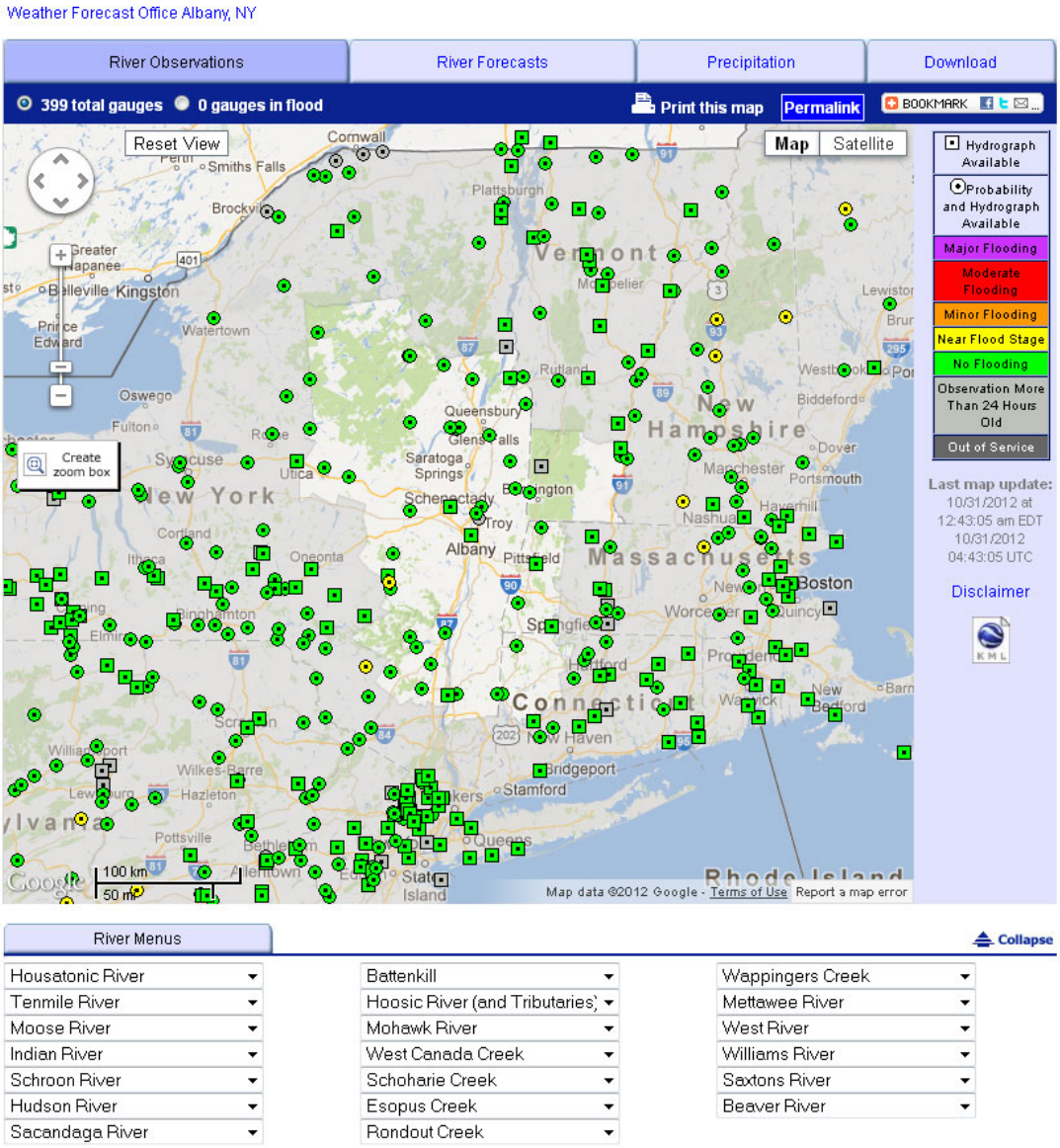
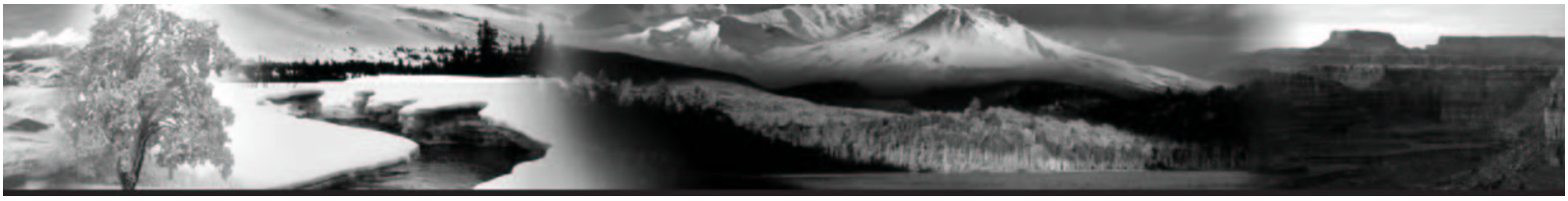


Figure 32: ALY AHPS HSA Page (River Menu Dropdown)



HSA (XXX) AHPS Specific Page

HSA webpage configuration items are edited under the NWS HSA tab. AHPS-specific HSA items, such as AHPS Webmaster question email configuration and additional hydrologic resource links, are edited on a more condensed version of the previous AHPS HSA page. It can be accessed via the "Options" dropdown navigation box [**HSA (XXX)**]. A sample of this page can be seen below:

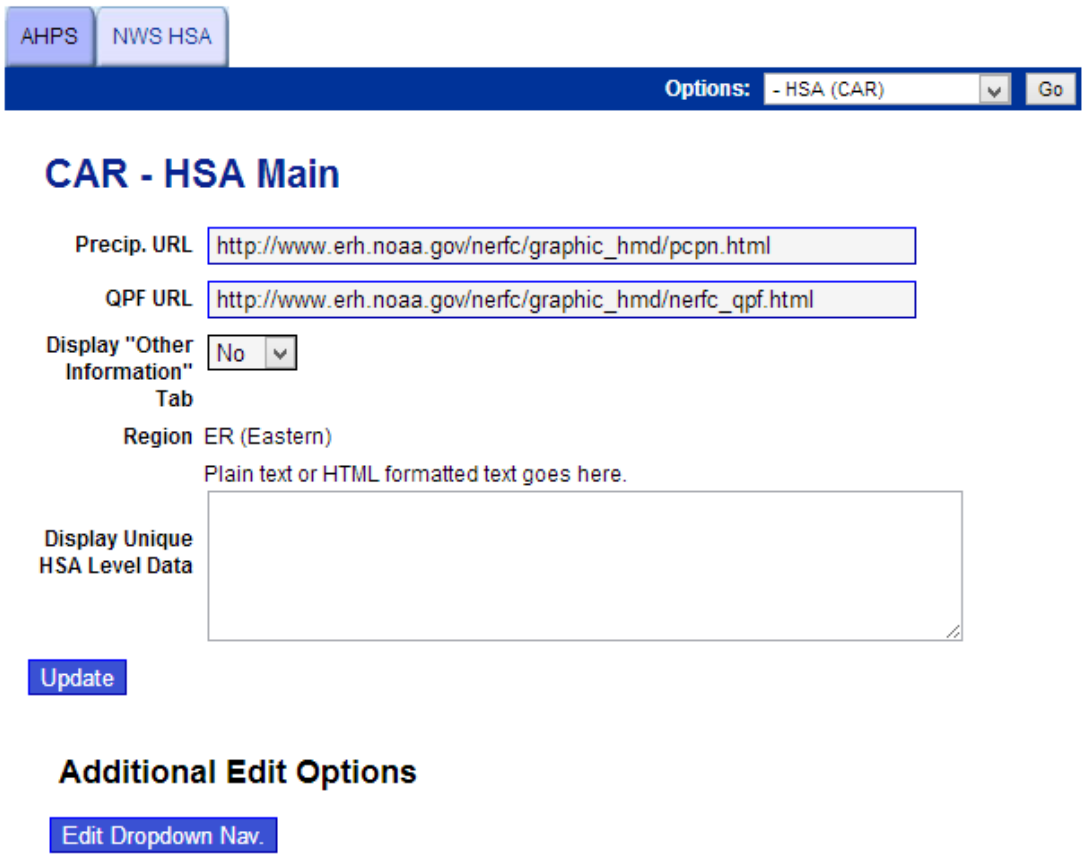


Figure 33: AHPS Specific HSA page (image 1)

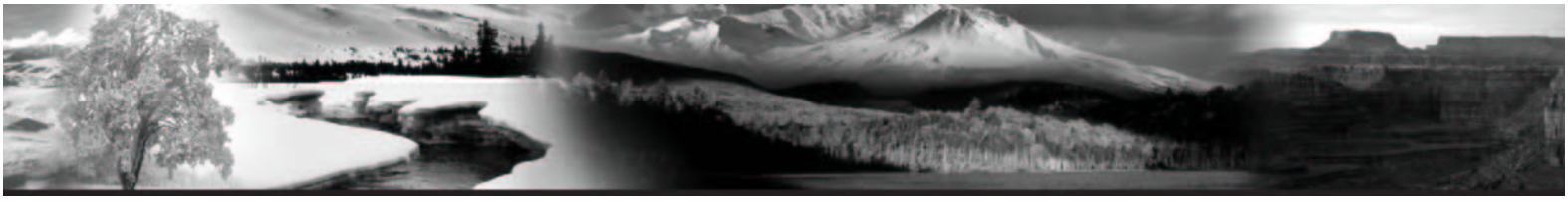
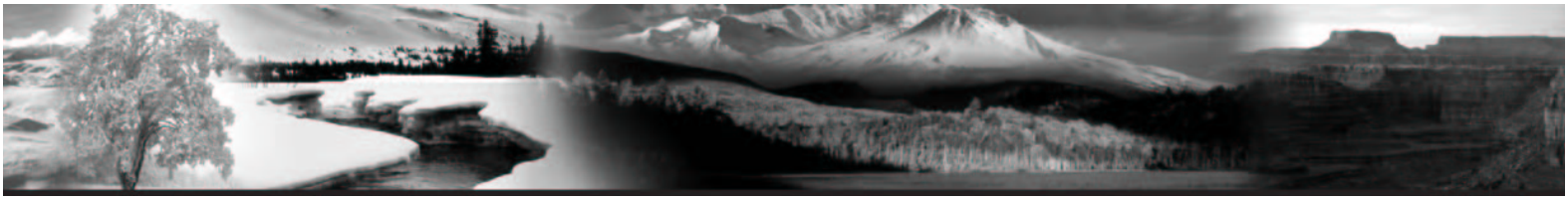
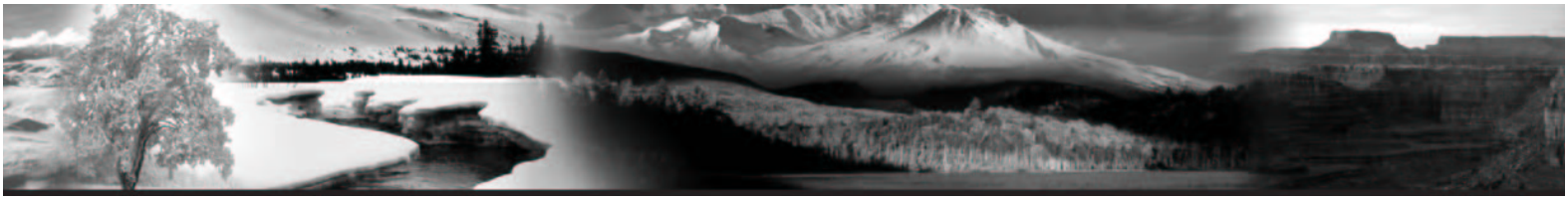


Figure 34: AHPS Specific HSA Page (image 2)

Configuration Item	Remarks
Precip. URL	This URL is linked to the Past Precipitation link under Hydrologic Resources on the HSA page.
QPF URL	This URL is linked to the Forecast Precipitation link under Hydrologic Resources on the HSA page.
Display "Other Information" Tab	This toggle is for the "Other Information" Tab on the HSA page



Configuration Item	Remarks
Region	NWS Region. This value is automatically assigned when creating the new gauge. It is based on the gauge site's geographical location and places it within one of six regions: Eastern, Central, Southern, Western, Alaskan and Pacific.
Display Unique HSA Level Data	This input box adds a "Unique Local Data" tab to the bottom of the HSA main page.
Additional Resource Links	Additional resource links can be added via this input. Input requires the link text and URL. The "new" button must be clicked after input has been entered. If a link text or URL has been modified, the "update" button should be used to save the data to the configuration database.
Hydrological Resource Links	Hydrological resource links can be added via this input. Input requires the link text and URL. The "new" button must be clicked after input has been entered. If a link text or URL has been modified, the "update" button should be used to save the data to the configuration database.
Ask Questions / Webmaster Address(es)	Email address(es) listed in this section will be linked to in the footer of AHPS web pages.
Non-Standard Text Products	This feature allows HSA(s) to add additional NWS products under the Text Product page link. This feature will allow nonstandard AHPS products to be added. Input for the field is the three-letter identifier of the product.



Appendix A – NWS HSA Module

HSA Configuration Module

When a user selects the module NWS HSA, they are directed to a page that will allow them to select either one or multiple HSAs depending upon their access configuration. Usually standard users will only have access to one HSA. Once a user selects a HSA, they are directed to a HSA Configuration Page, see (***Figures A-1 and A-2***)

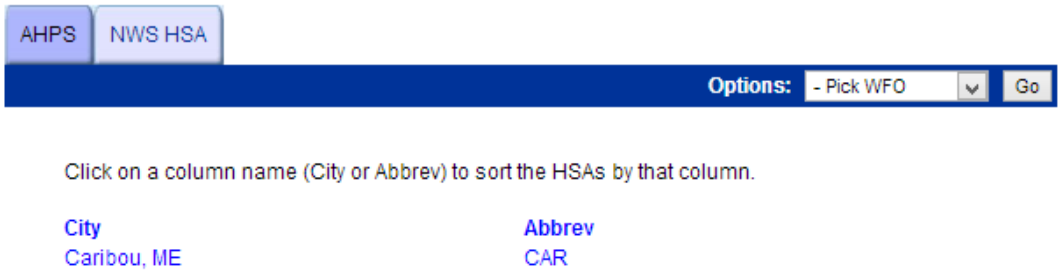


Figure A-1: HSA Selection

Clicking on the HSA link will take you to this interface:

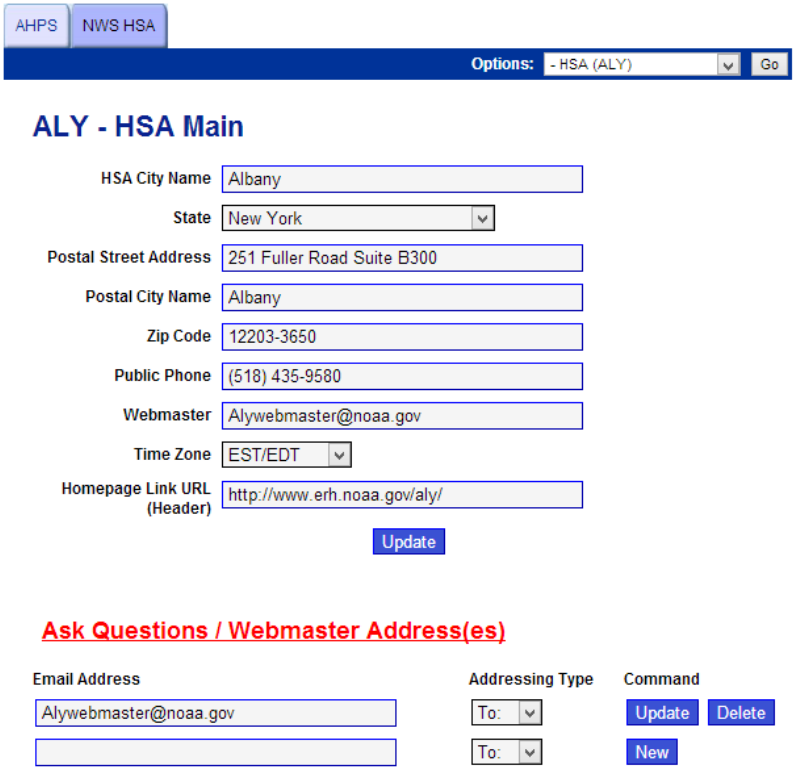
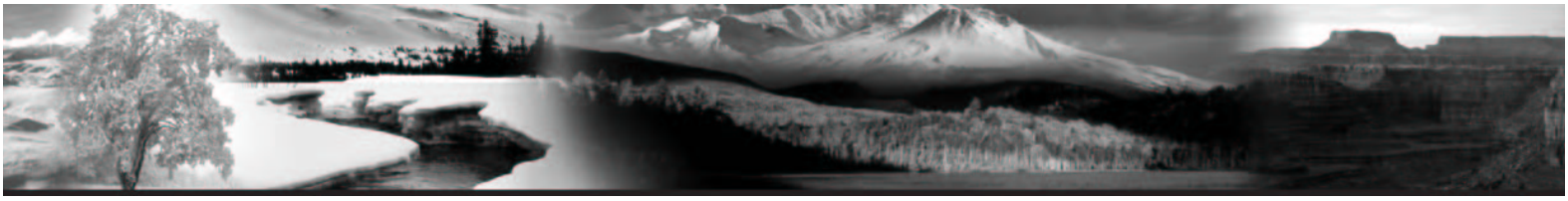


Figure A-2: NWS HSA Configuration Page



Configuration Item	Remarks
HSA City Name	The official HSA name
State	Dropdown selection box. State in which HSA is located.
Postal Street Address	Mailing address street address of the HSA. This information is used in the footer of each HSA AHPS page.
Postal City Name	Mailing address city name of the HSA. This information is used in the footer of each HSA AHPS page.
Zip Code	Mailing address zip code of the HSA. This information is used in the footer of each HSA AHPS page.
Public Phone	Public phone number of HSA.
Webmaster	Webmaster point of contact information
Time Zone	Dropdown selection box to select time zone
Webpage Title	Title of HSA Webpage
Home Link URL	URL of the HSA Homepage or HSA AHPS Page
Ask Questions / Webmaster Address(es)	Email address(es) listed in this section will be linked to in the footer of NWS HSA Home CMS Driven Web pages.

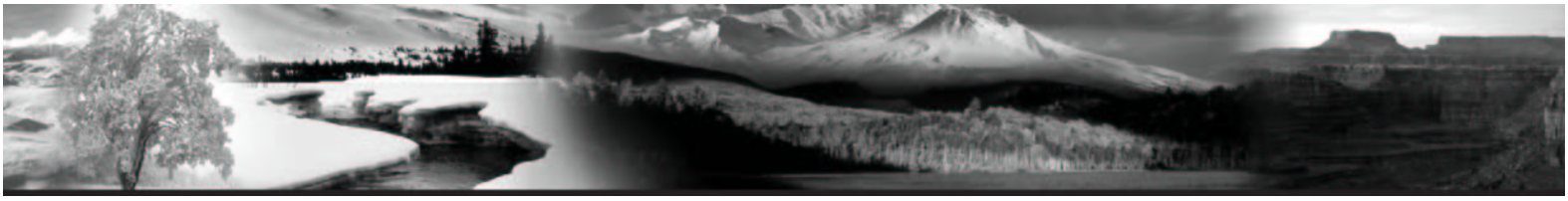
Once changes are made to configuration data, the user will need to click on the 

button for the section they have modified. This will save the modification to the configuration database.

Preferences Page

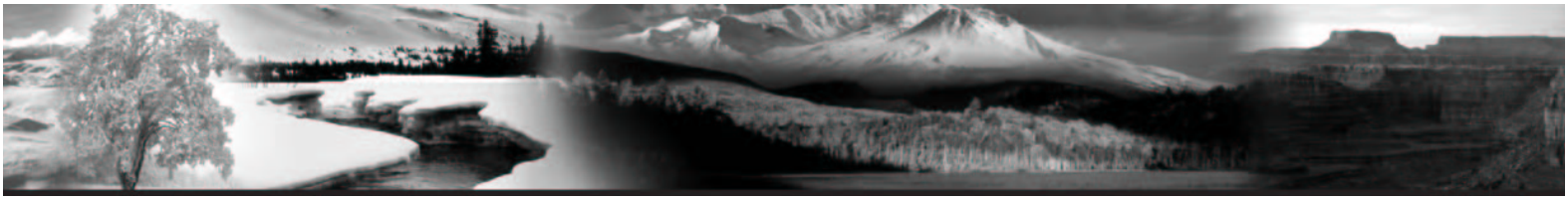
The Preferences Page ***Figure A-5*** allows the user to control **Daily Summary** and **Real-time** email notification settings. A **Daily Summary email** includes all NWS HSA CMS changes made for a 24-hour period and is transmitted once every 24 hours. A **Real-time email** includes changes that are made throughout the day and are transmitted as changes are made. The end user will only receive emails if changes have been made to a NWS HSA Web page that they have been associated with in their access configuration.

Figure A-5: Preferences Page



Appendix B – Map Layer(s) Editor

Map Layers Editing has been removed with the introduction of Google Mapping.

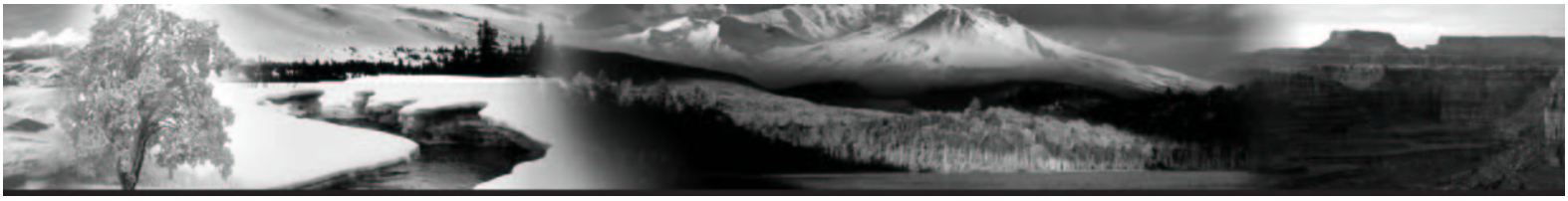


Appendix C – Gauge Photo Upload Tool

The National Weather Service

Guide for AHPS Gauge Photo Tool

Version 1.2



Background

The AHPS Gauge Photo Upload Tool was designed to allow NWS AHPS users to upload and edit AHPS Gauge Photo Information within a uniform interface for all Regions. This tool eliminates the need to store gauge photos in a directory within the Regional Systems and prevents errant file naming from hindering the display of the images.

The tool can be accessed at:
https://collaborate.werh.noaa.gov/ahps/photo_upload/index.php

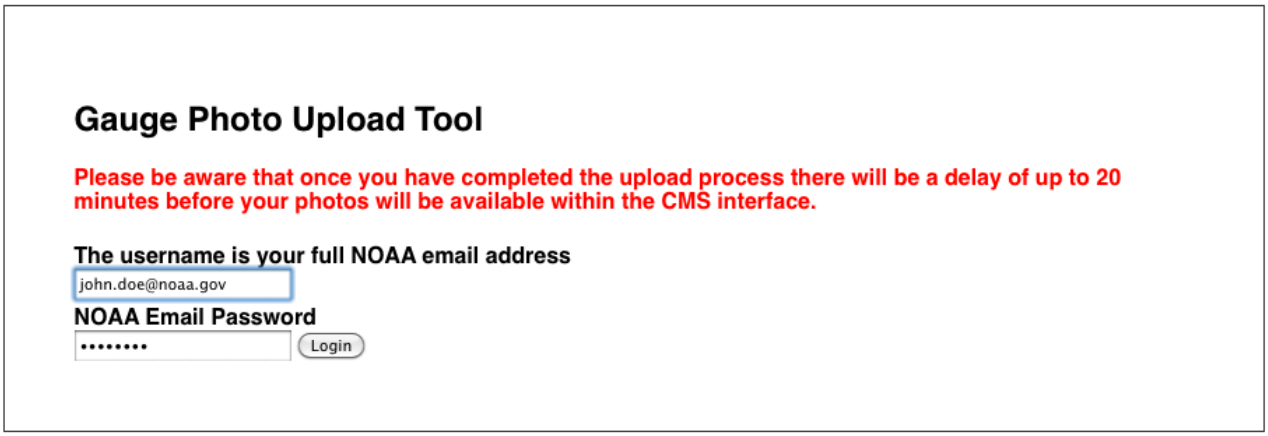
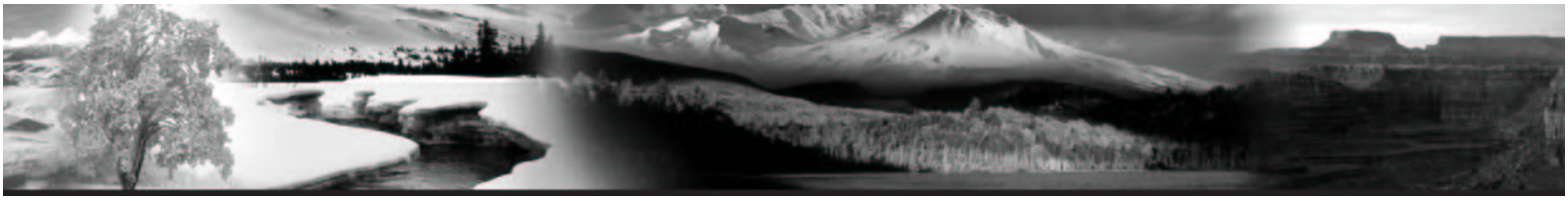


Figure 1: AHPS Gauge Photo Tool Login page



Functionality

Interface

The AHPS Gauge Photo Tool interface requires 5 steps to be completed to ensure a successful upload:

Login
HSA Selection
NWSLI Selection
Image File Browse/Preview
Upload of File
Add/Edit Photo Caption Information (AHPS CMS)

Login

Users will notice within the AHPS CMS that the usual photo management area has been replaced with a link to the new AHPS Photo Management Tool. Users can click the "click here" to be directed to the tool. (https://collaborate.werh.noaa.gov/ahps/photo_upload/index.php)

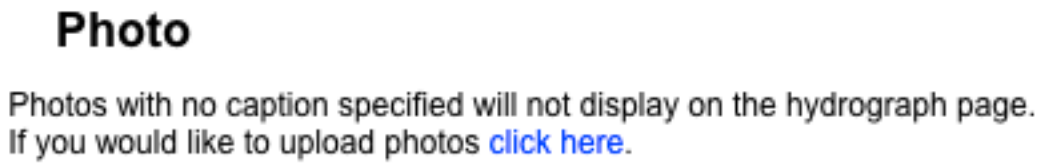
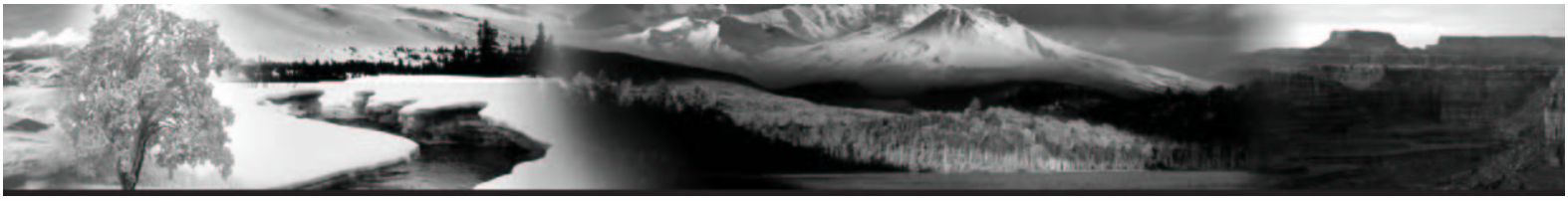


Figure 2: AHPS CMS Link Area



Once users have clicked the link they will be directed to the server in Eastern Region that hosts the tool. Depending on whether or not users have been to this server/tool before and how their machine handles cookies, users may be prompted with a login as shown in ***Figure 3***.

***Please Note: The login to this server should be in the format of firstname.lastname and DOES NOT need to include @noaa.gov. Whereas the Photo Upload Tool login that follows this login requires the full email address format.**

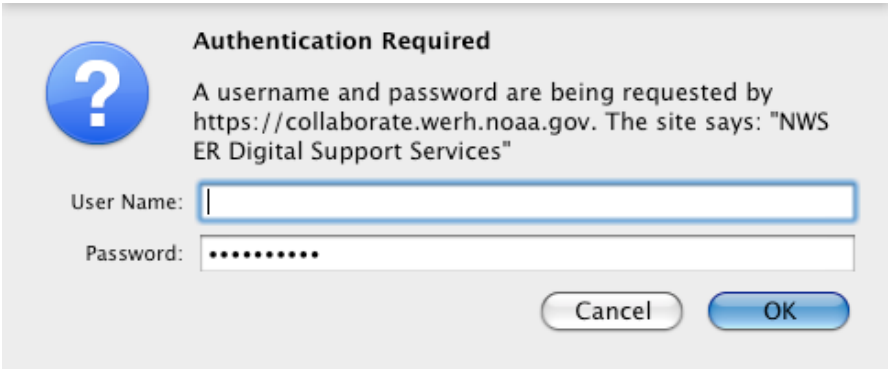


Figure 3: ER Digital Support Services Server Login

The login page of the AHPS Photo Management Tool as seen below. Users will need to login using the same login that they use with the AHPS CMS (**full** NOAA email address e.g.. john.doe@noaa.gov).

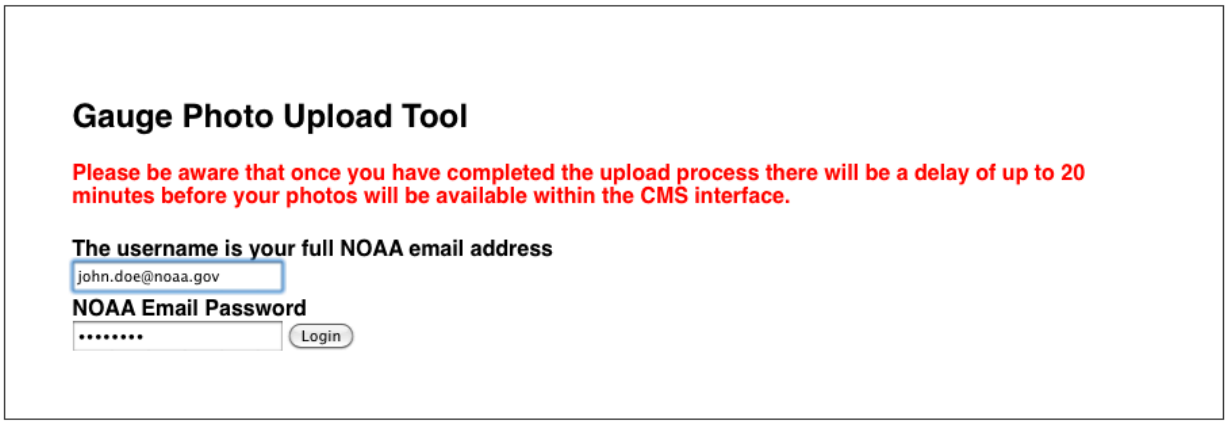
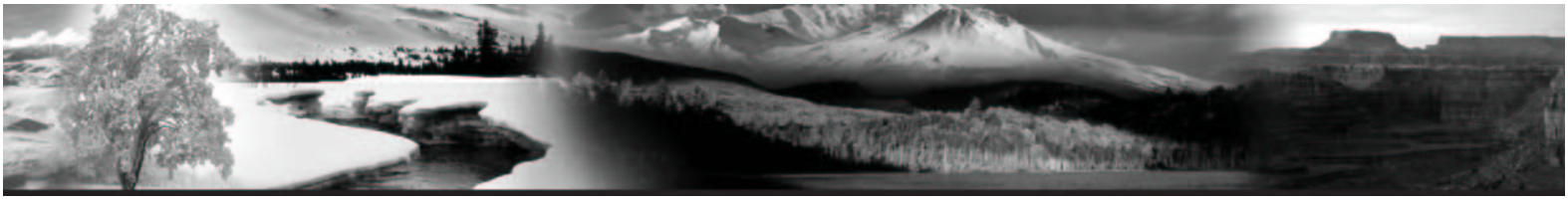


Figure 4: Login Screen



HSA Selection

After users have logged in they will be directed to a page that will display the username and a dropdown selection menu that will contain the WFO/HSA that the user has access to. Next, the user will need to select the WFO/HSA that the desired sensor is associated with from the menu.

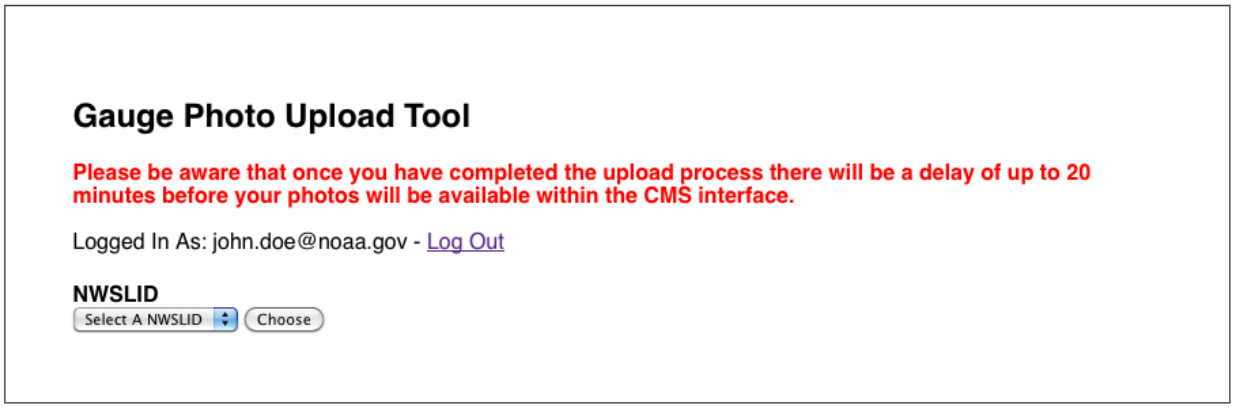


Figure 5: Successful Login Page

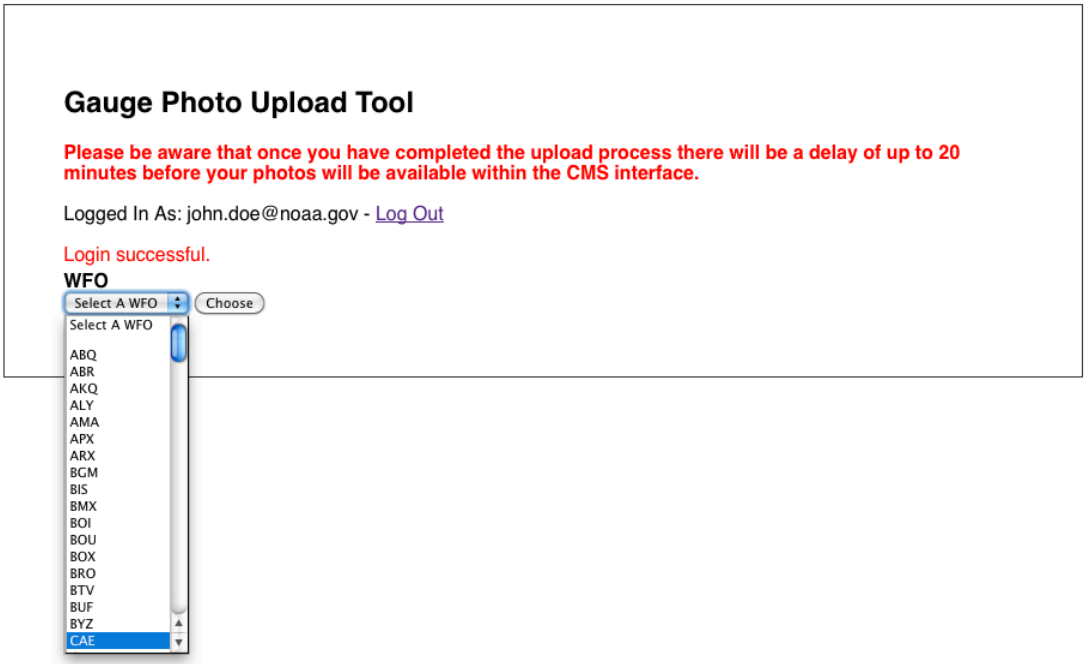


Figure 6: Selection of WFO / HSA

NWSLI Selection

After users have selected the desired HSA, they will be taken to another screen that will provide an NWSLI dropdown selection menu. Users will simply click the menu (sorted alphabetically) and choose the site ID that they would like to upload an image for. (See ***Figure 7*** below.)

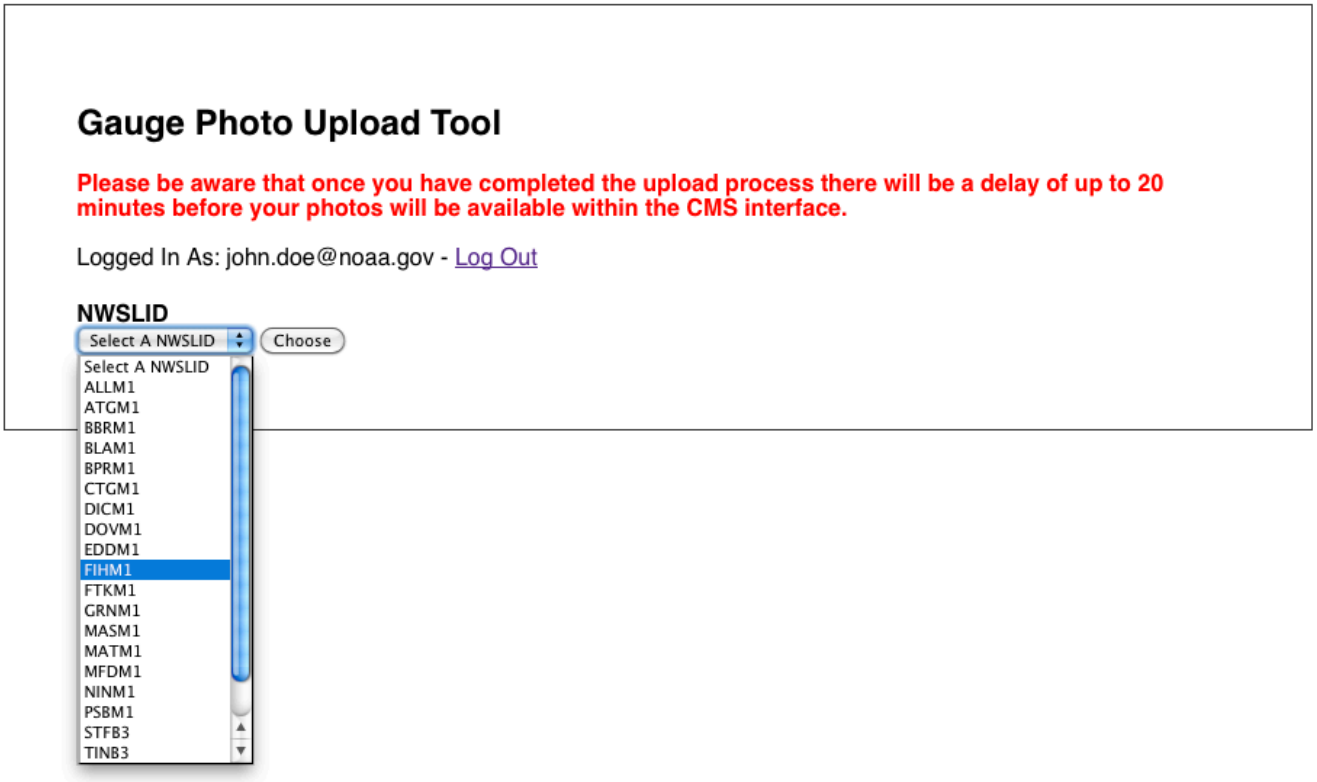


Figure 7: NWSLI Selection

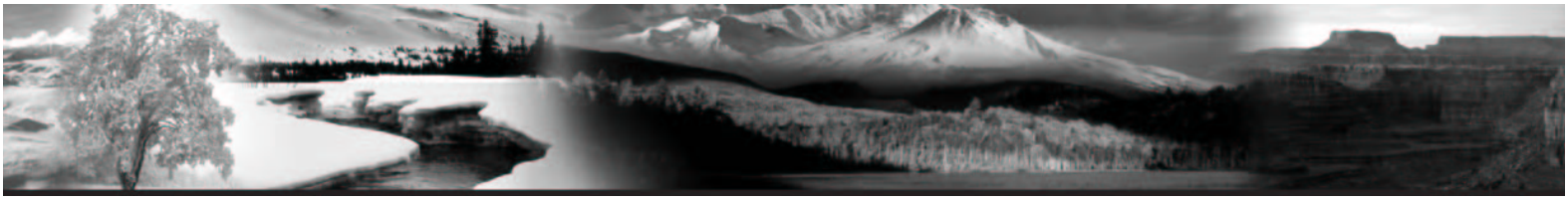


Image File Browse/Preview

After users have successfully located and selected the appropriate NWSLI, they will then be provided with an interface in which to select a local image file. Users will click the Browse... button to bring up the file selection window. After users have selected the desired file users can click Preview to view the file within the interface.

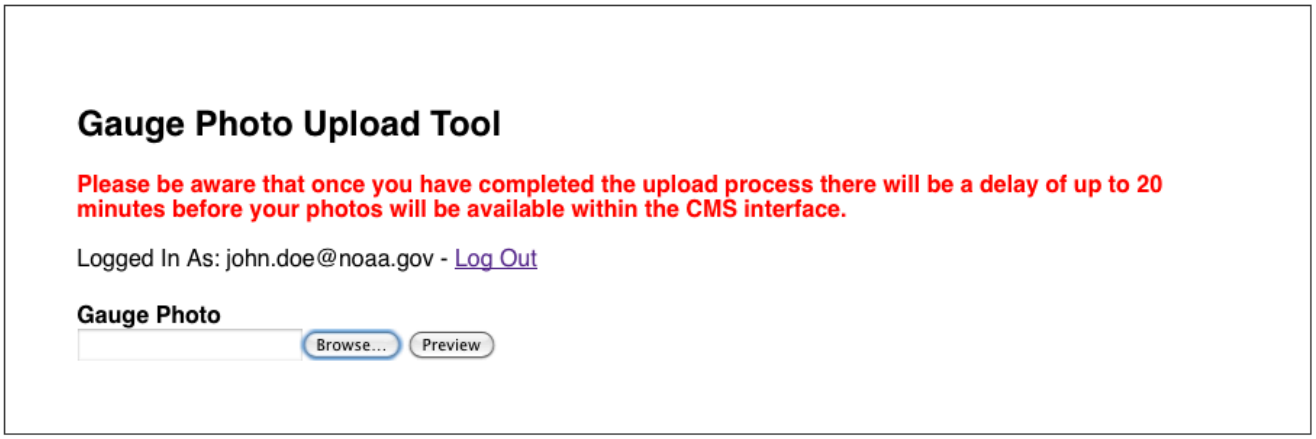
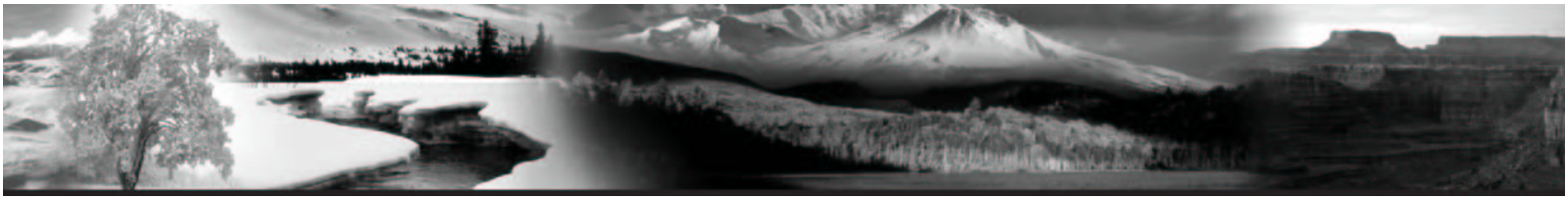


Figure 8: Image File Browse/Preview Page



Upload of File

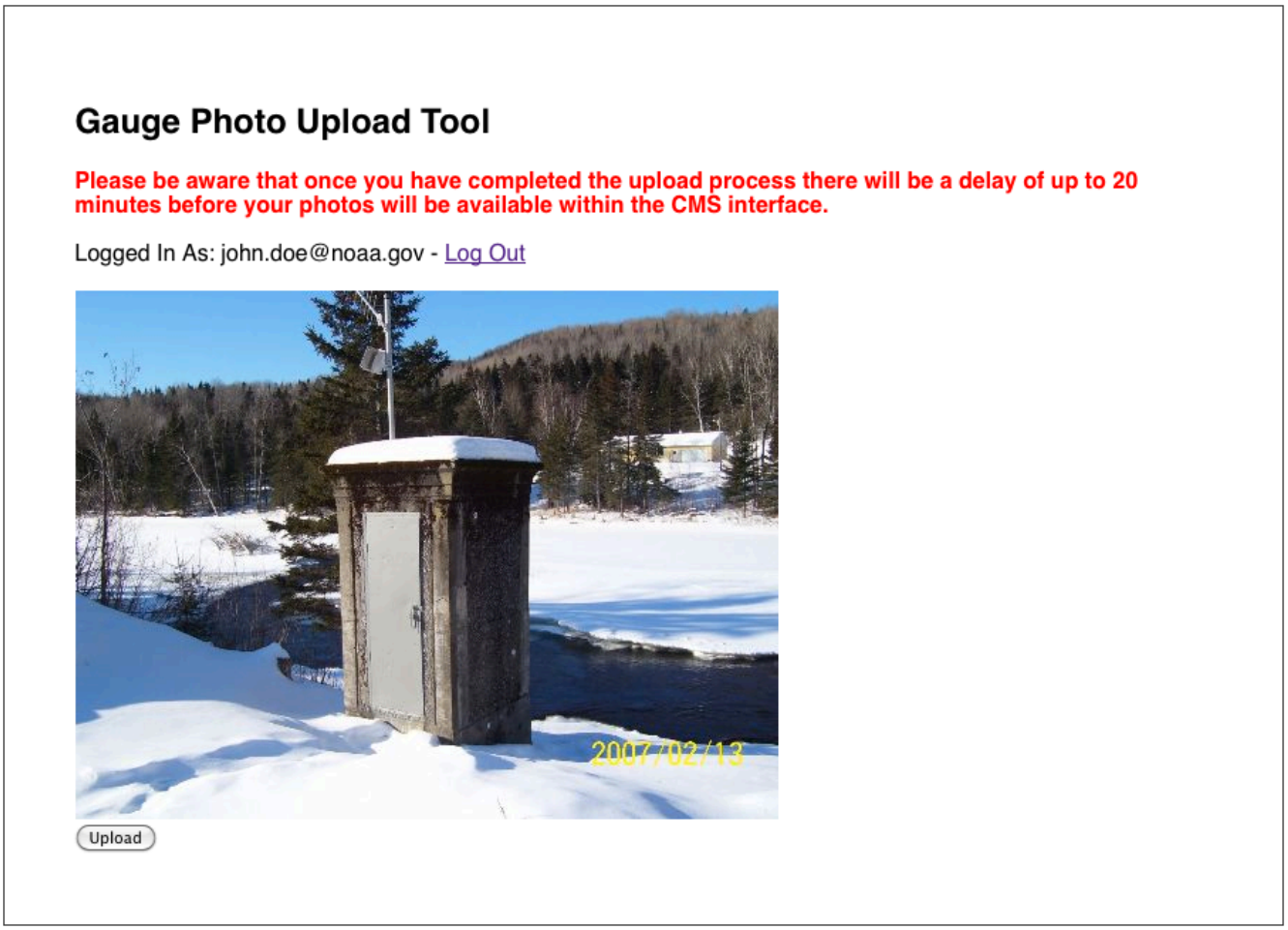
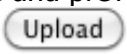
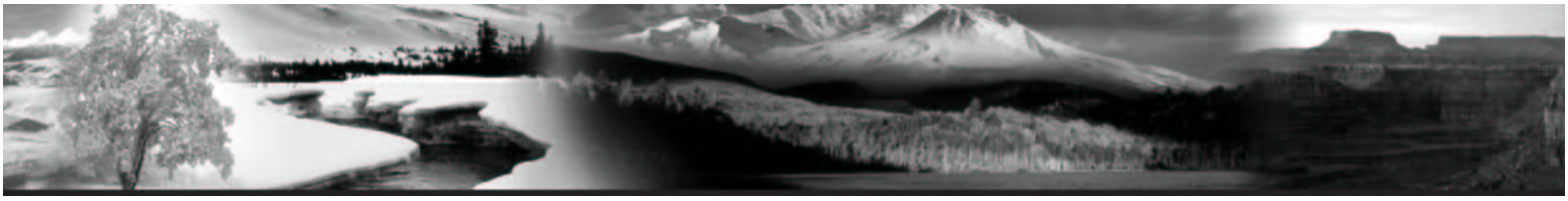


Figure 9: Sample Photo Selected and Previewed

After users have selected their desired image file and previewed the image to ensure it will display the way they wish, they should click  to queue the image file to move the AHPS servers.



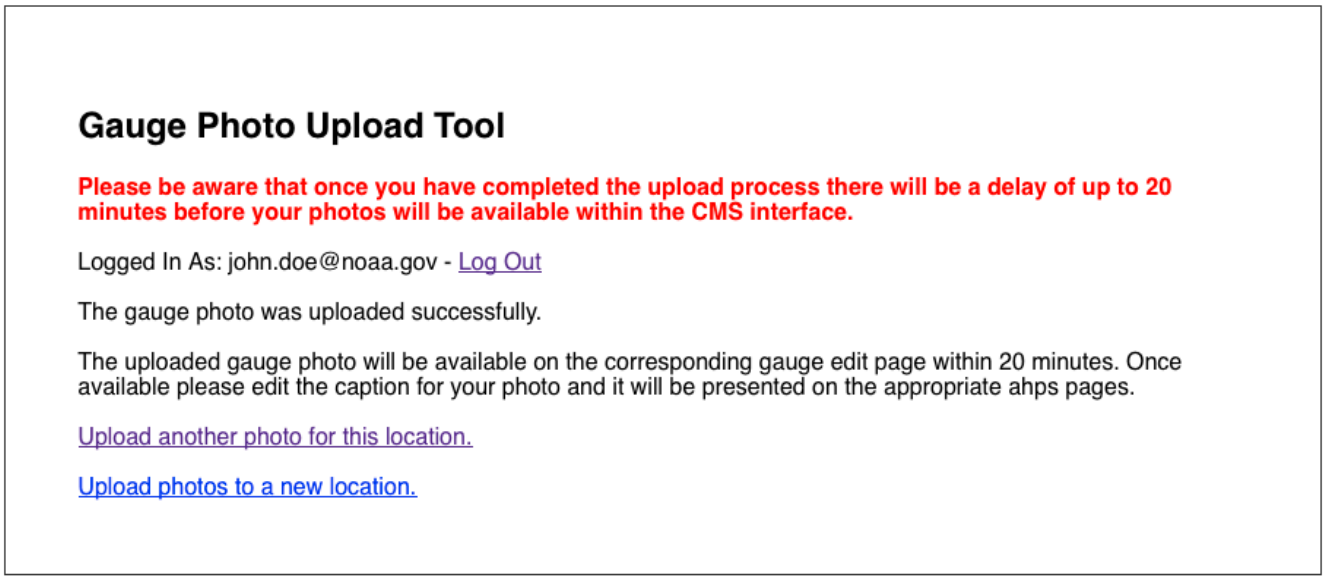


Figure 10: Successful Upload Confirmation Screen

When users have successfully uploaded their desired image they will be directed to a page where they can either upload additional photos for this location, choose to upload images to another location within the area of their responsibility, or simply log out of the tool. After the 20- minute period has passed, please login to the AHPS CMS and navigate to the corresponding "Gauge edit" page and edit the captions of the images so they will display on the hydrograph pages. See below:

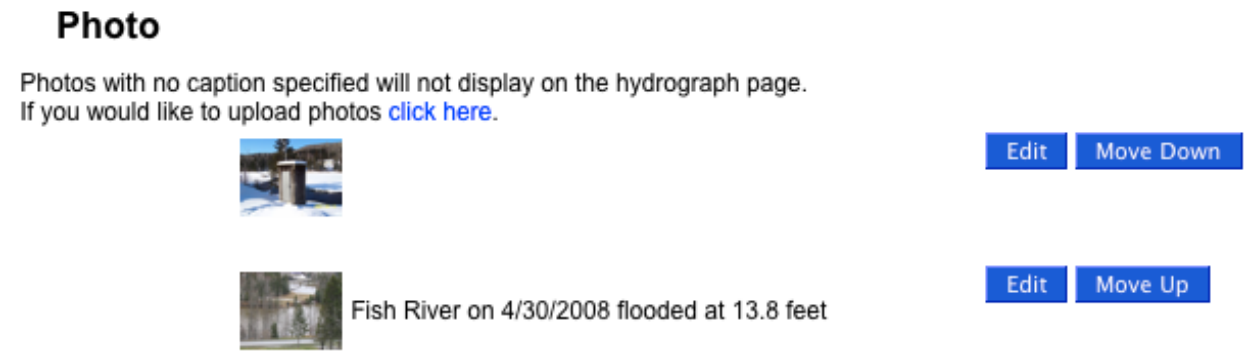
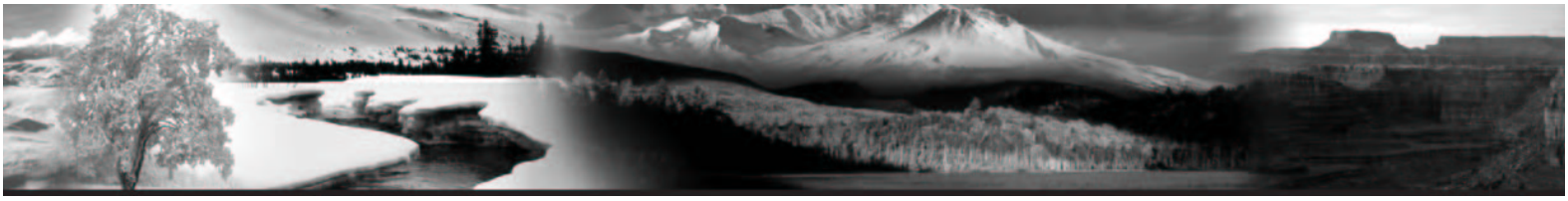


Figure 11: Caption/Photo Edit Area Gauge Edit Page (AHPS CMS)



Users will simply need to click Edit located to the right of the image thumbnail to access the area where they can add the text for the caption. See below:

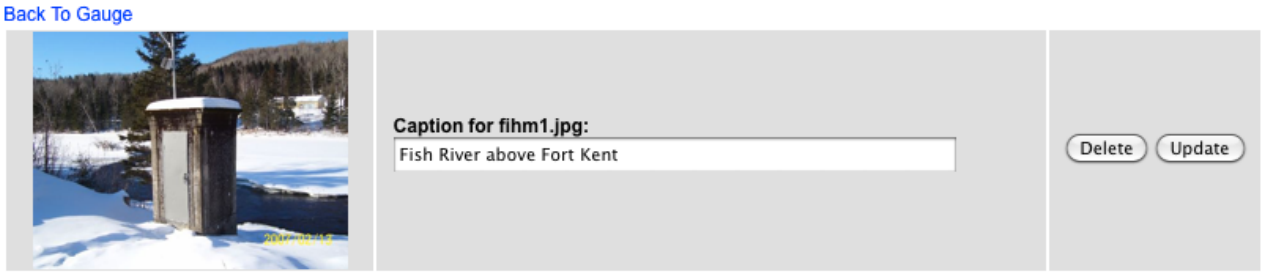


Figure 12: Caption Text Edit Area (AHPS CMS)

After the text has been input, users will click Update to add the caption to the image. Users will see a confirmation text appear below the Update button shown below. To return to the Gauge Edit Page, users will need to click "Back To Gauge" located just above the image. Once this has been completed users will be able to view the images on the hydrograph page, see below.

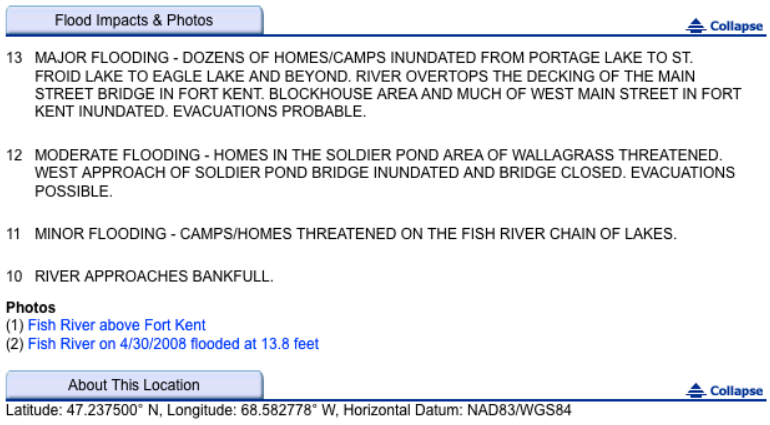
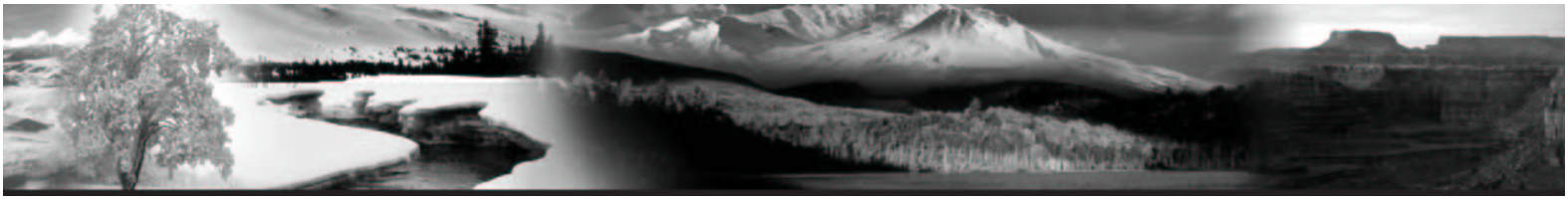


Figure 13: Available Photos on Hydrograph Page



Appendix D – AHPS CMS Admin Functions

Scope:

Within the AHPS CMS there are certain features that are only available to AHPS CMS Administrators. This group of users includes the NWS Region Hydro Focal Points and their associated backups, NWS HQ/OHD Management, and NWS CMS Administrators. The purpose of this section is to provide direction as to how these features function so that new administrators can become educated on these operational features.

Introduction:

To begin this supplement we will introduce the methodology used to identify an "Admin Only" type feature. Below in ***Figures D-1 and D-2*** users can see there are some subtle differences in the selectable options available. What is most noticeable is in ***Figure D-2*** there are some selection titles that are colored **Bright Blue (HSA and RSS Location).** This is how users can clearly identify an "Admin Only" feature.

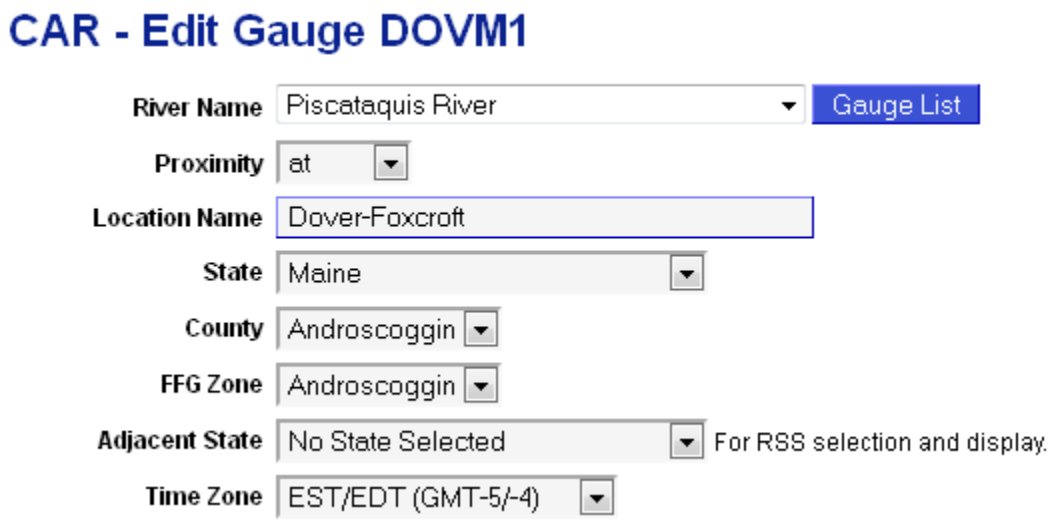
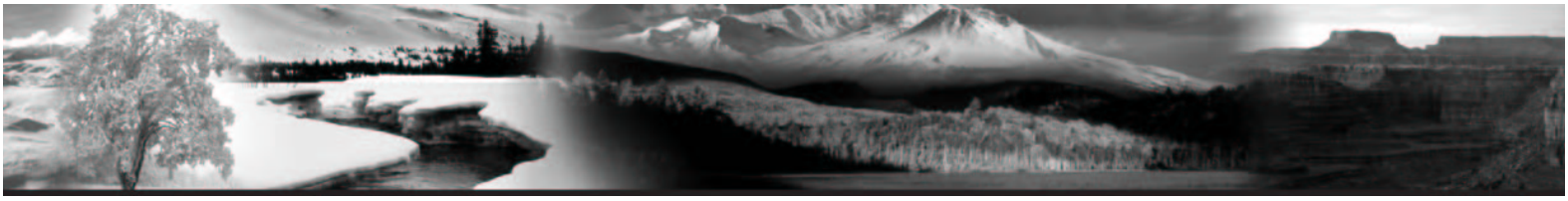


Figure D-1: Gauge Configuration Page (Standard AHPS User)



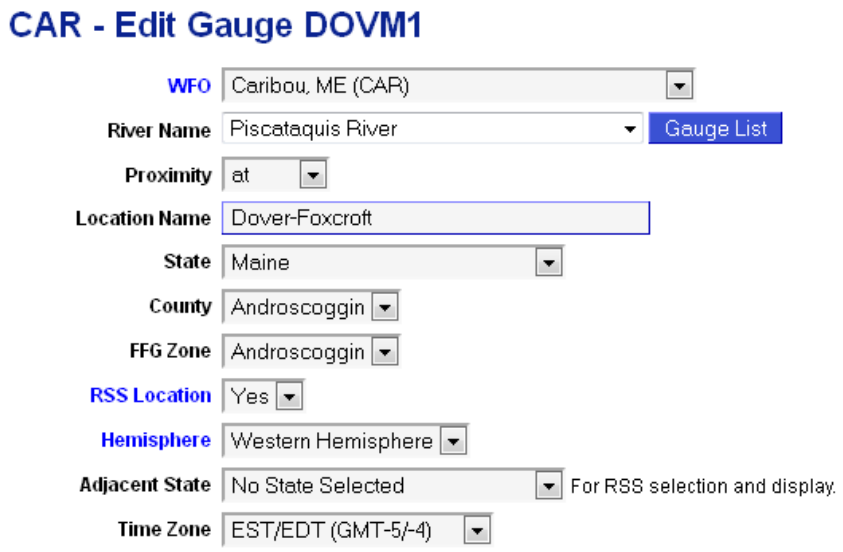
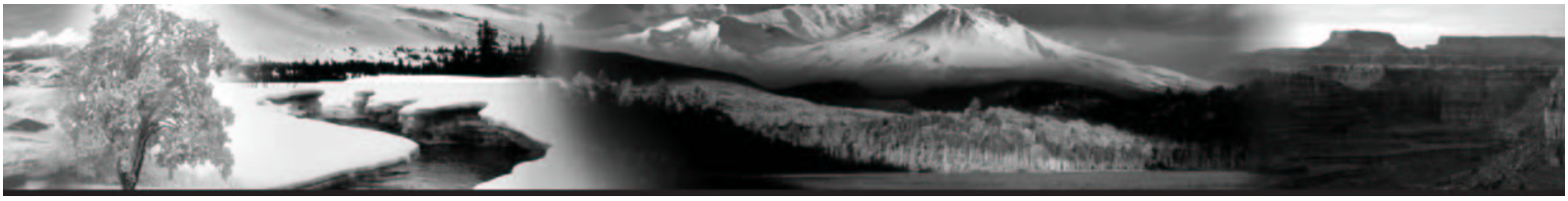


Figure D-2: Gauge Configuration Page (AHPS Admin User)

Along with select functions on certain pages within the AHPS CMS, AHPS Administrators have several selections within the "Options" dropdown selection menu that are not available to Standard AHPS CMS Users. The items are:

- Changelog
- Compass
- Datum Explanations
- Datum Notes
- AHPS Globals
- Hydronotes
- Inundation Messages
- RFC Conf
- RSS Page Text
- Warnings
- Y Axis Content

This supplement will cover all of these items in detail along with any additional "Admin Only" items that may be located on the pages available to Standard AHPS CMS Users. We will begin with the items that reside on the pages that are shared between the two user types then move to the items that are available exclusively to AHPS Administrators.



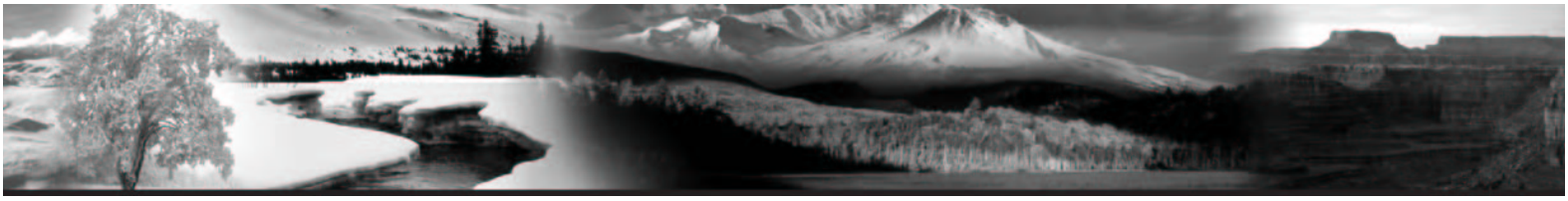
Gauge Edit Page – Admin Only Functions

On the Gauge Edit Page there are seven items that are available to AHPS Administrators that are not available to standard users. These are covered below:

Configuration Item	Remarks
HSA	Dropdown selection box that allows the gauge to be assigned to the selected HSA.
Hemisphere	Dropdown selection box where users can select Western Hemisphere or Eastern Hemisphere. This selection helps with the placement of the River/Stream Location marker on the Google Maps.
RSS Location	Dropdown selection box where users can select either "Yes" or "No" If yes is selected the data from the gauge will have RSS data feed generated for the location.
USGS URL	Text Entry Box where users can enter the URL for that locations data within USGS web.
Latitude NRLDB	Latitude Values as populated by NRLDB. Adjustable by an admin on a temporary basis; overwritten by the NRLDB database each day. Only positive numbers are allowed.
Longitude NRLDB	Longitude Values as populated by NRLDB. Adjustable by an admin on a temporary basis; overwritten by the NRLDB database each day. Only positive numbers are allowed.

Gauge Edit Page (Edit HydroGen) – Admin Only Functions

Configuration Item	Remarks
HydroGen Upper Headroom	Dropdown selection box that allows the user to define a value from 1ft-15ft to provide additional feet padding to the top of the hydrographs.



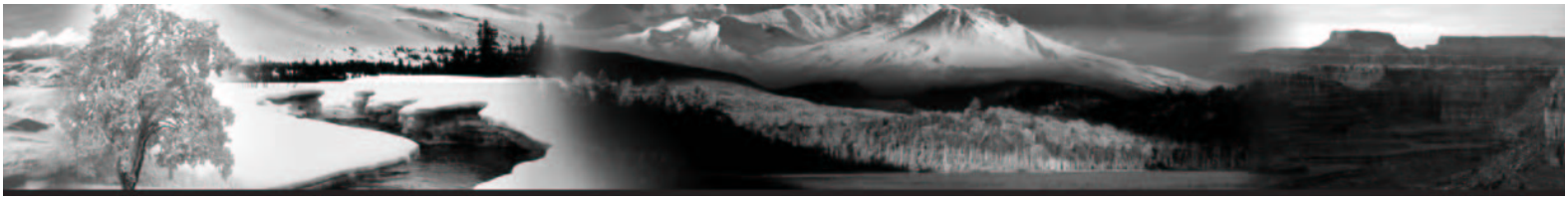
Gauge Edit Page (Edit Inundation) – Admin Only Functions

AHPS Administrators have the ability to set whether or not a gage site is an Inundation Location and edit the Inundation configuration for that site. To access this area users will need to click Edit Inundation from the Gage Edit Page. This will direct users to a page where they can choose to enable the Inundation "Tab" for a gauge site. See ***Figure D-3*** below.

Figure D-3: Inundation Enable Page

***Please note for Inundation items a site from HSA RAH will be displayed (GLDN7).**

When users set the "Enable Inundation" option to "Yes" and click Update they will be directed to a page where thy can actually edit the parameters for the Inundation Site. See ***Figure D-4*** on next page.

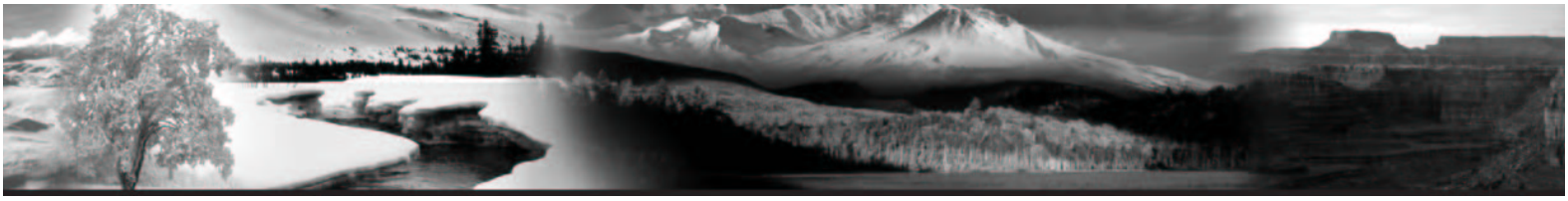


RAH - Edit Gauge Inundation for GLDN7

Using Google Maps

Enable Inundation	Yes
Google Default Map	Hybrid
Min Google Map Zoom	10
Max Google Map Zoom	17
Default Google Map Zoom	13
Display USACE Attribution Logo	Yes
USACE Attribution URL	http://www.dem.dcc.state.nc.us/
USACE Attribution Logo Alt Text	NC State Partner
Display USGS Attribution Logo	No
Display Partner Attribution Logo 1	No
Display Partner Attribution Logo 2	No
Custom Layer 1	No
Custom Layer 2	No
Custom Layer 3	No
Custom Layer 4	No
Custom Layer 5	No
Custom Layer 6	No
Custom Layer 7	No
Custom Layer 8	No
Custom Layer 9	No
Custom Layer 10	No
1% Annual Exceedance Flood Probability	Yes
0.2% Annual Exceedance Flood Probability	Yes
Display Inundation Extent Boundary	Yes
Show Floodway Data Layer	Yes
Show Overview Map	No
Default Flood Stage Category	Below
Zero Datum Reference Value	41.926
Depth Offset Value	45.35
Depth Range	1
Max Depth Value	29.074

Figure D-4a: Inundation Edit Page (top third)



Max Depth Value: 29.074

Color Palette: 255

Available Stages:
```
56.0,56.5,57.0,57.5,58.0,58.5,59.0,59.5,60.0,60.5,61
.0,61.5,62.0,62.5,63.0,63.5,64.0,64.5,65.0,65.5,66.0
,66.5,67.0,67.5,68.0,68.5,69.0,69.5,70.0,70.5,71.0
```

A comma seperated list of stages (i.e. 50,51,53,55,60).

Selected Stages

☑ 56.0 ft	☐ 61.5 ft	☑ 67.0 ft
☐ 56.5 ft	☑ 62.0 ft	☐ 67.5 ft
☑ 57.0 ft	☐ 62.5 ft	☑ 68.0 ft
☐ 57.5 ft	☑ 63.0 ft	☐ 68.5 ft
☑ 58.0 ft	☐ 63.5 ft	☑ 69.0 ft
☐ 58.5 ft	☑ 64.0 ft	☐ 69.5 ft
☑ 59.0 ft	☐ 64.5 ft	☑ 70.0 ft
☐ 59.5 ft	☑ 65.0 ft	☐ 70.5 ft
☑ 60.0 ft	☐ 65.5 ft	☑ 71.0 ft
☐ 60.5 ft	☑ 66.0 ft	
☑ 61.0 ft	☐ 66.5 ft	

Show Flood Categories in Menu: Yes

Default Layer Opacity: 65 %

Upper Latitude Boundary: 35.368719

Eastern-Most Longitude Boundary: -77.951891

Lower Latitude Boundary: 35.305805

Western-Most Longitude Boundary: -78.030217

Map Center Latitude Boundary: 35.337500

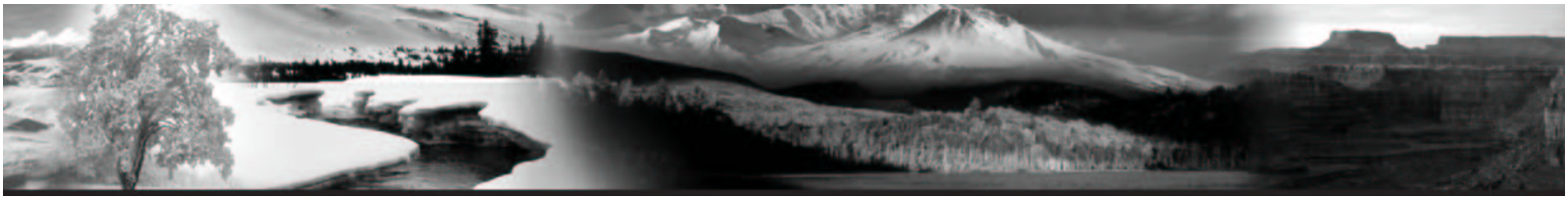
Map Center Longitude Boundary: -77.997500

Site Specific Information:

Empirical Rating:

Update

Figure D-4b: Inundation Edit Page (middle third)



Empirical Rating

Update

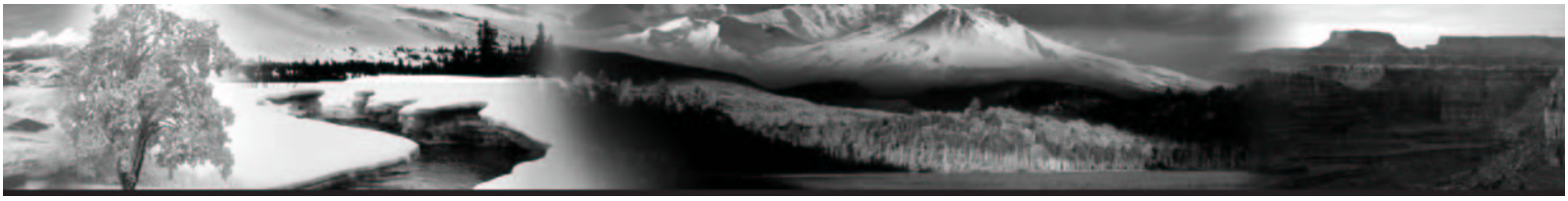
Layer Order

Layer Order	Commands
Order: 14	move up / move down
Order: 13	move up / move down
Order: 12	move up / move down
Order: 11	move up / move down
Order: 10	move up / move down
Order: 9	move up / move down
Order: 8	move up / move down
Order: 7	move up / move down
Order: 6	move up / move down
Order: 5	move up / move down
Order: 4	move up / move down
Order: 3	move up / move down
Order: 2	move up / move down
Order: 1	move up / move down
Selected Flood Stages	
Order: -1 inundation_display_floodway	move up / move down
Order: -2 inundation_500_yr_flood	move up / move down
Order: -3 inundation_100_yr_flood	move up / move down
Order: -4 inundation_display_extent	move up / move down
Order: -5	move up / move down
Order: -6	move up / move down
Order: -7	move up / move down
Order: -8	move up / move down
Order: -9	move up / move down
Order: -10	move up / move down
Order: -11	move up / move down
Order: -12	move up / move down
Order: -13	move up / move down
Order: -14	move up / move down

Return to Gauge Editor

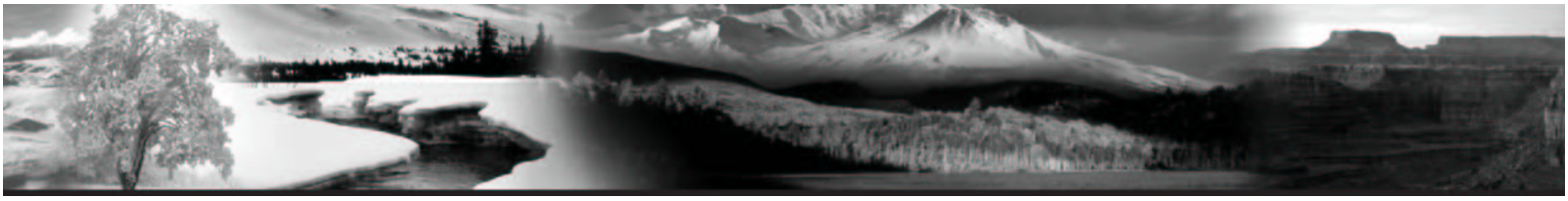
Figure D-4c: Inundation Edit Page (bottom third)

All features on this page will be discussed below via a table that is formatted to display the Configuration Item and Remarks about the item/option.

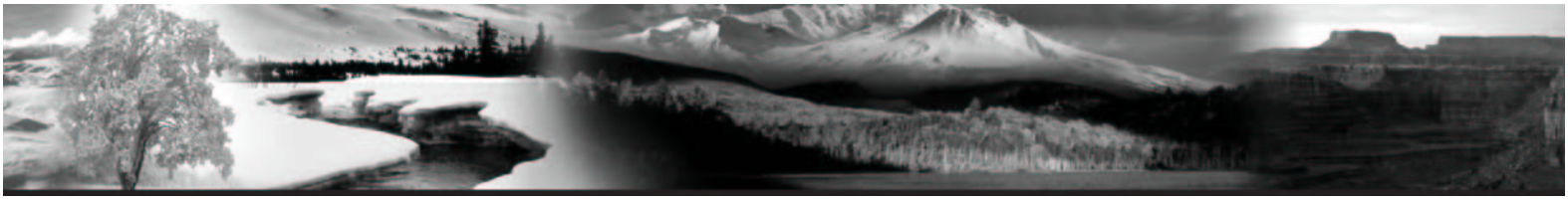


Configuration Item	Remarks
Enable Inundation	Dropdown selection box **Yes/No** to enable or disable Inundation settings.
Google Default Map	Dropdown selection box. Select from **Satellite, Hybrid, Roadmap or Terrain**.
Min Google Map Zoom	Text field, numerical range, 1-20. The furthest that you want to allow users to zoom out on the map.
Max Google Map Zoom	Text field, numerical range, 1-20. The closest that you want to allow users to zoom in on the map.
Default Google Map Zoom	Text field, numerical range, value between previously entered min and max values. The default zoom level on page load.
Display USACE Attribution Logo	Dropdown selection box **Yes/No**. Selects whether or not to display the United States Army Corps of Engineers data partner logo. The CMS Support Team is in charge of managing the logo database at this time. The logo will be displayed in the Blue Left-hand Data Selection and Navigation Area.
USACE Attribution URL	Text field for a URL for the USACE office that helped with inundation data. URL must start with *http:* or *https:*.
USACE Attribution Alt Text	Text field for the alternate text for the USACE logo image.
Display USGS Attribution Logo	Dropdown selection box **Yes/No.** This option determines whether or not to display the USGS logo in the Inundation Partnership Area located in the Blue Left-hand Data Selection and Navigation Area. If this is selected the link to the USGS site is applied to this logo by default.
USGS Attribution URL	Text field for a URL for the USGS office that helped with inundation data. URL must start with *http:* or *https:*.
USGS Attribution Alt Text	Text field for the alternate text for the USACE logo image. The CMS Support Team is in charge of managing the logo database at this time. The logo will be displayed in the Blue Left-hand Data Selection and Navigation Area.
Display Partner Logo 1-2	Dropdown selection box **Yes/No**. This option selects whether or not to display the state partner logos that have worked to help provide data for the inundation project.

Configuration Item	Remarks
Partner Attribution URL	Text field for a URL for gauge data partner site, if applicable. URL must start with *http:* or *https:*.
Partner Attribution Alt Text	Text field for descriptive text for gauge data partner. The CMS Support Team is in charge of managing the logo database at this time. The logos will be displayed in the Blue Left-hand Data Selection and Navigation Area.
Custom Layer 1-10	Dropdown selection box **Yes/No**. Enables further text fields for custom map data provided by field offices. Up to ten custom layers may be applied to a location. Custom layers must be added when the inundation site is processed. If the option to use custom layers is turned on and no images are present, there will be an error on the map.
Custom Layer 1-10 Title	Text field for descriptive text for custom layer.
1% Annual Exceedance Flood Probability	Dropdown selection box **Yes/No.** This option determines whether or not the DFIRM 1% Annual Exceedance (100 year flood) data layer will be displayed as a selectable option for a location. If these data are not available, it is recommended that this be set to **No**. Custom title options are available, but the title will default to 1% Annual Exceedance Flood Probability if an empty value is submitted.
0.2% Annual Exceedance Flood Probability	Dropdown selection box **Yes/No.** This option determines whether or not the DFIRM 0.2% Annual Exceedance (500 year flood) data layer will be displayed as a selectable option for a location. If these data are not available, it is recommended that this be set to **No**. Custom title options are available, but the title will default to .2% Annual Exceedance Flood Probability if an empty value is submitted.
Display Inundation Extent Boundary	Dropdown selection box **Yes/No.** This option determines whether or not the Inundation Extent Boundary Lines will be drawn on the Inundation Mapping Area along areas where data look to end abnormally. This is to help note the area of the Inundation Study Information. Custom title options are available, but the title will default Inundation Extent Boundary if an empty value is submitted.



Configuration Item	Remarks
Show Floodway Data Layer	Dropdown selection box **Yes/No.** This option determines whether or not the DFIRM Floodway data layer will be displayed as a selectable option for a location. If these data are not available, it is recommended that this be set to **No**. Custom title options are available, but the title will default Inundation Floodway if an empty value is submitted.
Show Overview Map	Dropdown selection box **Yes/No**. Displays thumbnail of area in and around the view port in southeastern corner of Google Map. Can be toggled off and on by user on map as well.
Default Flood Stage Category	Dropdown selection menu with the five categories of flooding: **Below, Near, Minor, Moderate, Major**. This selection determines which flood category image loads by default on the Flood Categories page.
Zero Datum Reference Value	Text input box that will accept a numeric input value that will be used for the NAVD88 zero datum elevation reference.
Depth Range	Text input box that will accept a numeric input value. Value is 1 by default. When a user mouses over the inundation image and the depth is displayed, this value is the range returned. Example: 2.2 - 3.2 feet
Max Depth Value	Text input box that will accept a numeric value. Maximum depth of site at its highest inundation level.
Color Palette	Text input box that will accept a numeric value. This value is the number of colors in the color palette used to generate all of the inundation images in the site. The default value is 255.
Available Stages	Text input box that will accept a numeric input values in comma-separated format. This is where available stage values for a gauge inundation site are input. The stage value must always be a float value, even if it is a whole number. Example: 3.0,4.0.
Selected Stages	Checked-selection boxes that are displayed in coordination with the Available Stages values input into the configuration interface. The values that are selected here will be displayed within on the



Configuration Item	Remarks
	Inundation Levels page.
Show Flood Categories in Menu	Dropdown selection box **Yes/No.** This option determines whether or not the Flood Categories will be displayed within the Blue Left-hand Data Selection and Navigation area.
Default Layer Opacity	Text/Numeric input box. This box will accept a numeric value (0-100) that will represent the default opacity of all data layers. This is same layer opacity that is controlled by the Transparency Level Control Slider.
Upper Latitude Boundary	The Northern-Most Latitude (Top-Parallel) Boundary for the Inundation Area image overlay.
Eastern-Most Longitude Boundary	The Eastern-Most Longitude Boundary (Right Vertices) for the Inundation Area Map.
Lower Latitude Boundary	The Southern-Most Latitude Boundary (Bottom-Parallel) for the Inundation Area Map.
Western-Most Longitude Boundary	The Western-Most Longitude Boundary (Left Vertices) for the Inundation Area Map.
Map Center Latitude Boundary	Text input box for numeric values. Automatically populates with value from gauge location latitude, but can be changed to center on inundation image.
Map Center Longitude Boundary	Text input box for numeric values. Automatically populates with value from gauge location longitude, but can be changed to center on inundation image.
Site Specific Information	Text box for gauge-specific instructions or information about the location and its data.
Empirical Rating	Text box to provide disclaimer for how depths are calculated. "Rating Curve Extension - The Rating Curve Extension is calculated by using either a linear, logarithmic, or hydraulic technique to extend the rating curve above the currently established relationship between stage and flow."
Layer Order	Allows the users to adjust the display stacking order of FIM layers when presented on the Google Map interface. The inundation depth layer is always defined as zero (0). **Positive** order values will appear to display above the inundation depth layer. **Negative** order values will appear to display below the inundation depth layer.

Gauge Edit Page (Edit Quick Links) – Admin Only Functions

AHPS Administrators have the ability to set a variety of links and corresponding thumbnails for each gauge in the Quick Links feature. These links are gauge-specific and display in the InfoWindow that appears when a gauge marker is clicked on from the region-level map. See ***Figure D-5*** below.

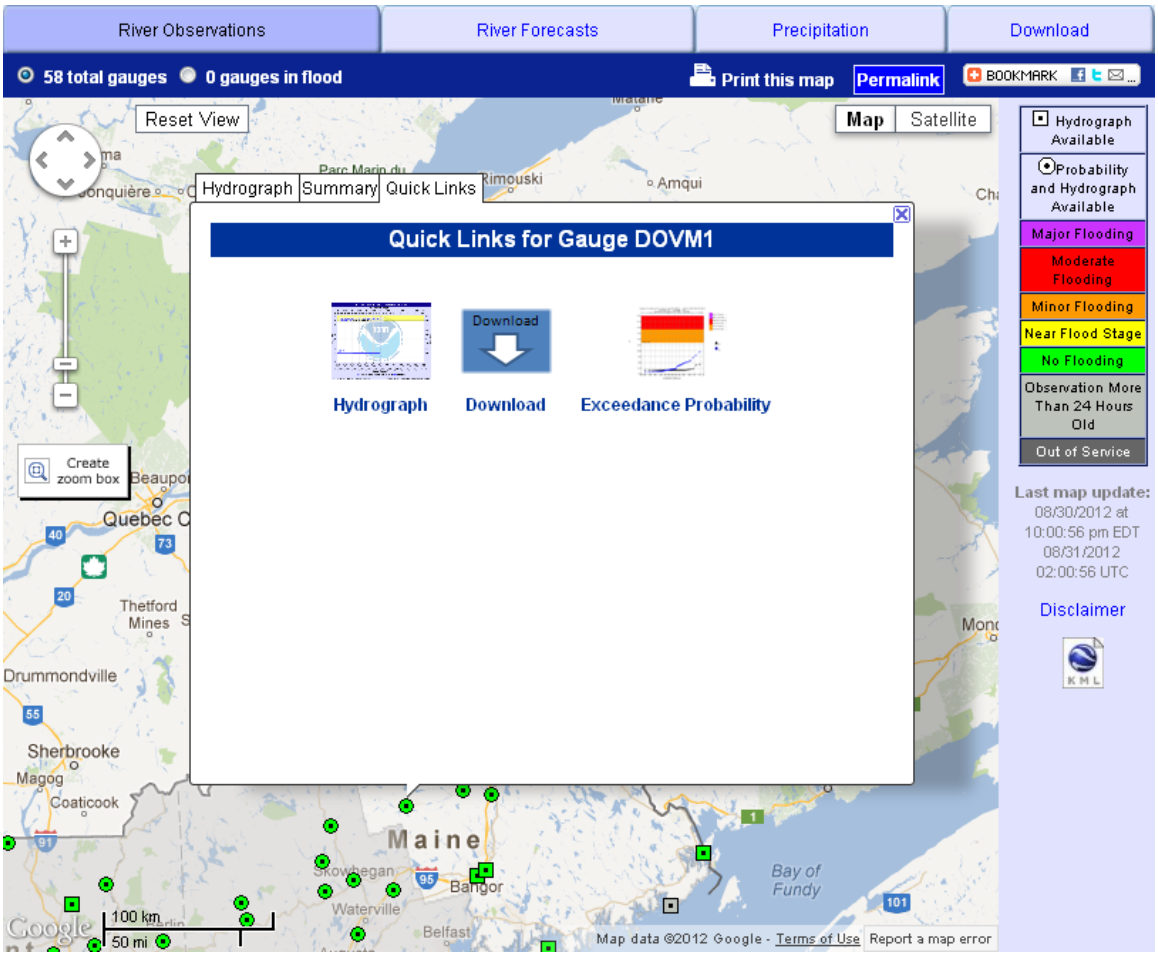
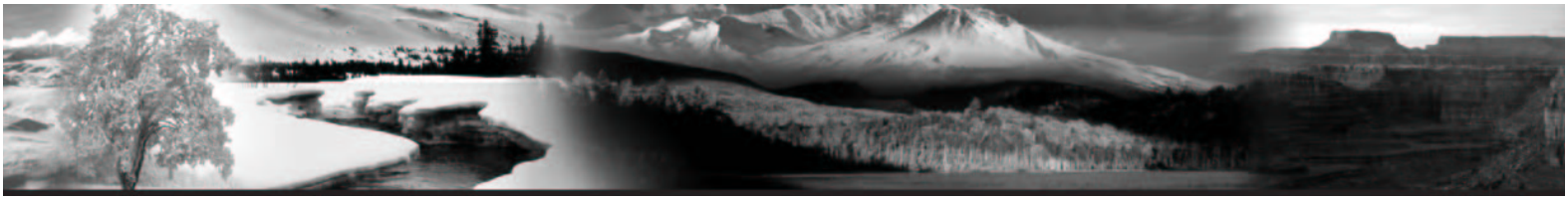


Figure D-5: Quick Links as they appear on the AHPS map



To access this area users will need to click Edit Quick Links from the Gauge Edit Page. This will direct users to a page where they can choose which links they want displayed on the Quick Links tab and further customize default links. See ***Figure D-6*** below.

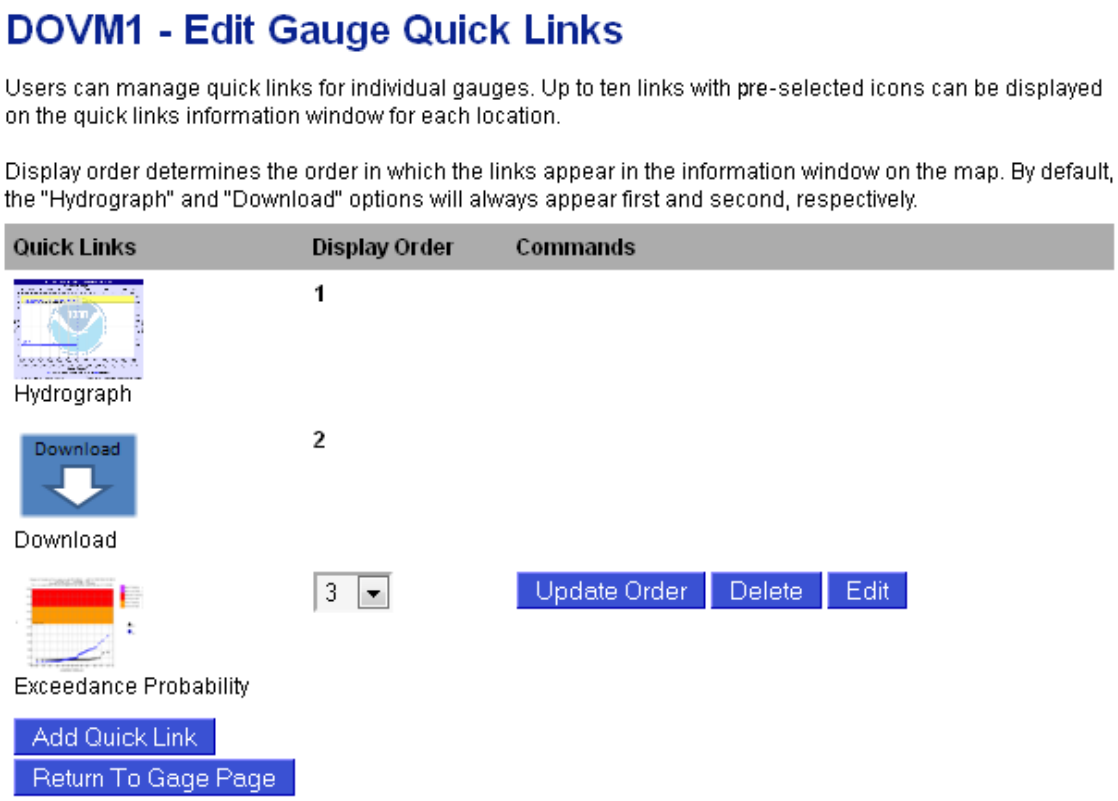


Figure D-6: Edit Gauge Quick Links overview

The links for the Hydrograph page and Download page are hard-coded into the Quick Links settings and cannot be altered or removed. Up to seven custom links can be added and can have their display order changed from 3 through 10 by using the dropdown selection menu. To change the order, select a new number from the dropdown menu and click Update Order.

To add a new Quick Link, click on Add Quick Link. To edit an existing Quick Link, click on Edit in the same row as the link you want to alter. This will take you to a new page. See ***Figure D-7*** below. To return to the edit gauge page, click on Return To Gage Page.

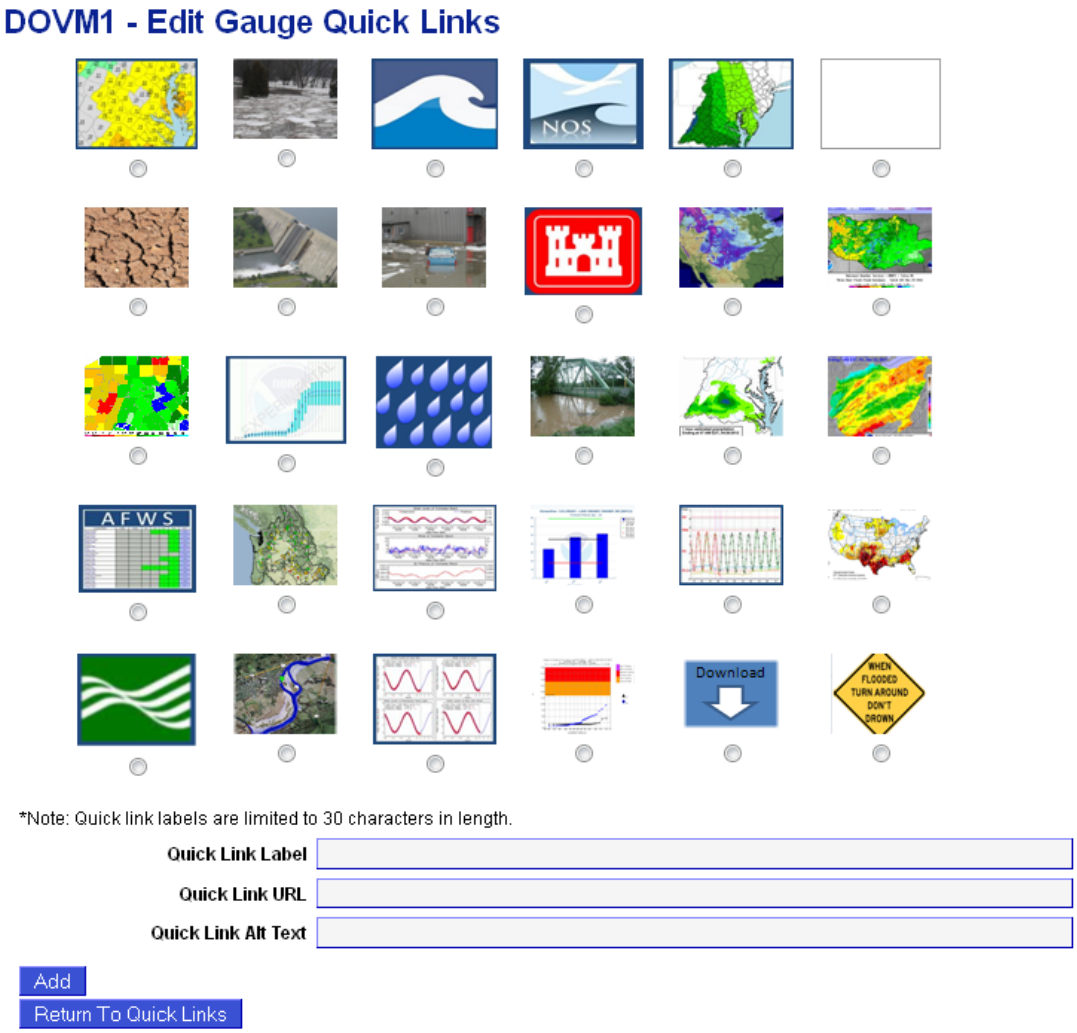


Figure D-7: Adding or editing a Quick Link

Once on the Edit Gauge Quick Links page, you can select one of 30 pre-made icons and enter or update three text values for the link: the Label, URL and Alt Text.

Configuration Item	Remarks
Quick Link Label	Text that will appear as a link under the icon. Limited to 30 characters.
Quick Link URL	Web address for Quick Link. URL should start with *http://* or *https://*.
Quick Link Alt Text	Text that will appear as alt text for Quick Link icon.

When you are finished making changes, click "Add" or "Update" to save your Quick Link.

If you want to delete a Quick Link from a gauge, click on Delete in the same row as the link you want to remove. You will be directed to a new page, where you will be asked to confirm that you want to continue with the deletion. See ***Figure D-8*** below. To cancel, click Cancel. This will return you to the Edit Quick Links overview page.

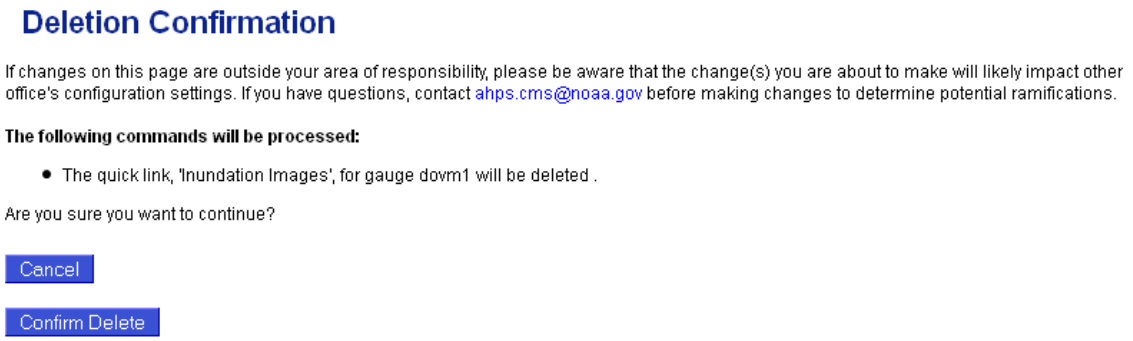
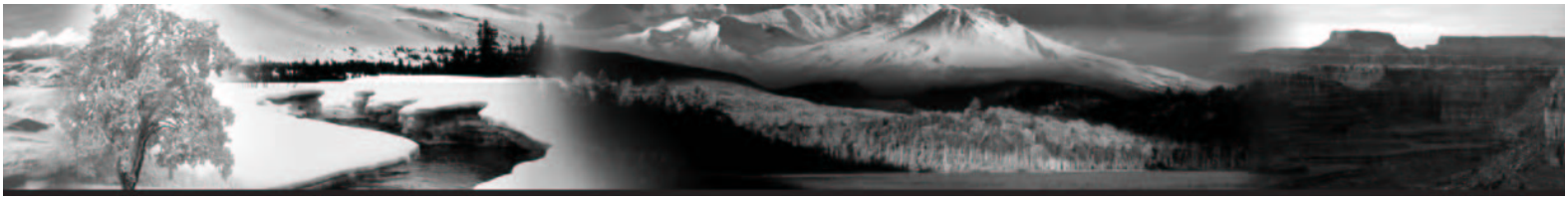


Figure D-8: Delete Confirmation in the Quick Links editor

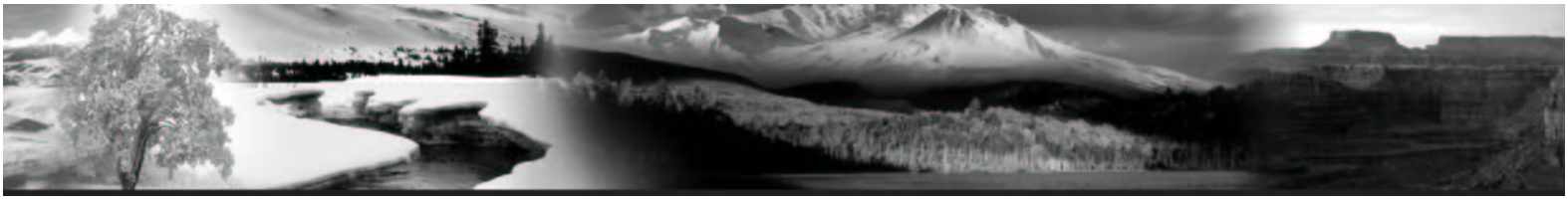


AHPS Administrator Only Dropdown Items

We will now cover the items that are available exclusively to AHPS Administrators. Some selectable items will only appear in the "Options" dropdown selection box based upon where users are within the interface. For example, before users select a HSA, they will have the options of:

- RFC Conf
- RSS Page Text
- Warnings
- Y Axis Content
- Water Resource Regions
- States

If a HSA is selected, in addition to the options above, users will gain the option to view the Changelog for the particular selected HSA along with standard changelog. We will present the data as the interface presents it with the items above first and the items that are included pages once a HSA is selected.



RFC Conf

RFC Conf is where AHPS Administrators can enter information for River Forecast Center Pages. When this item is selected users are directed to a page like the one below in ***Figure D-9***. Once on this page users can simply click on a RFC to enter the RFC Edit Page ***Figure D-10*** on following page.

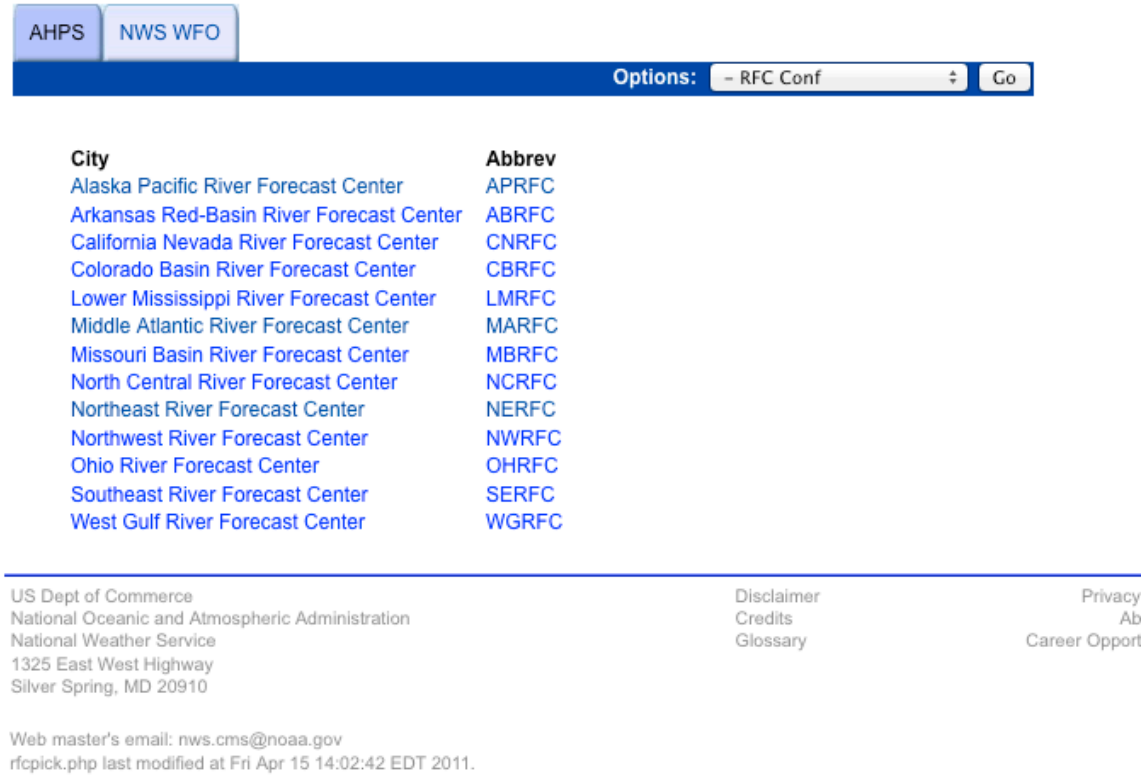
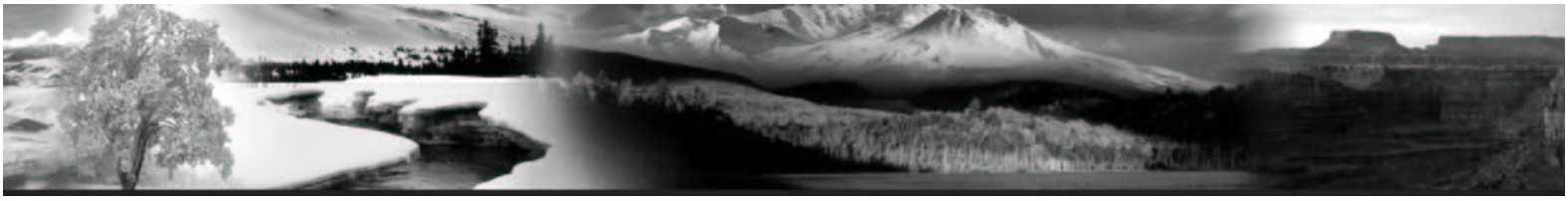


Figure D-9: RFC Conf Page



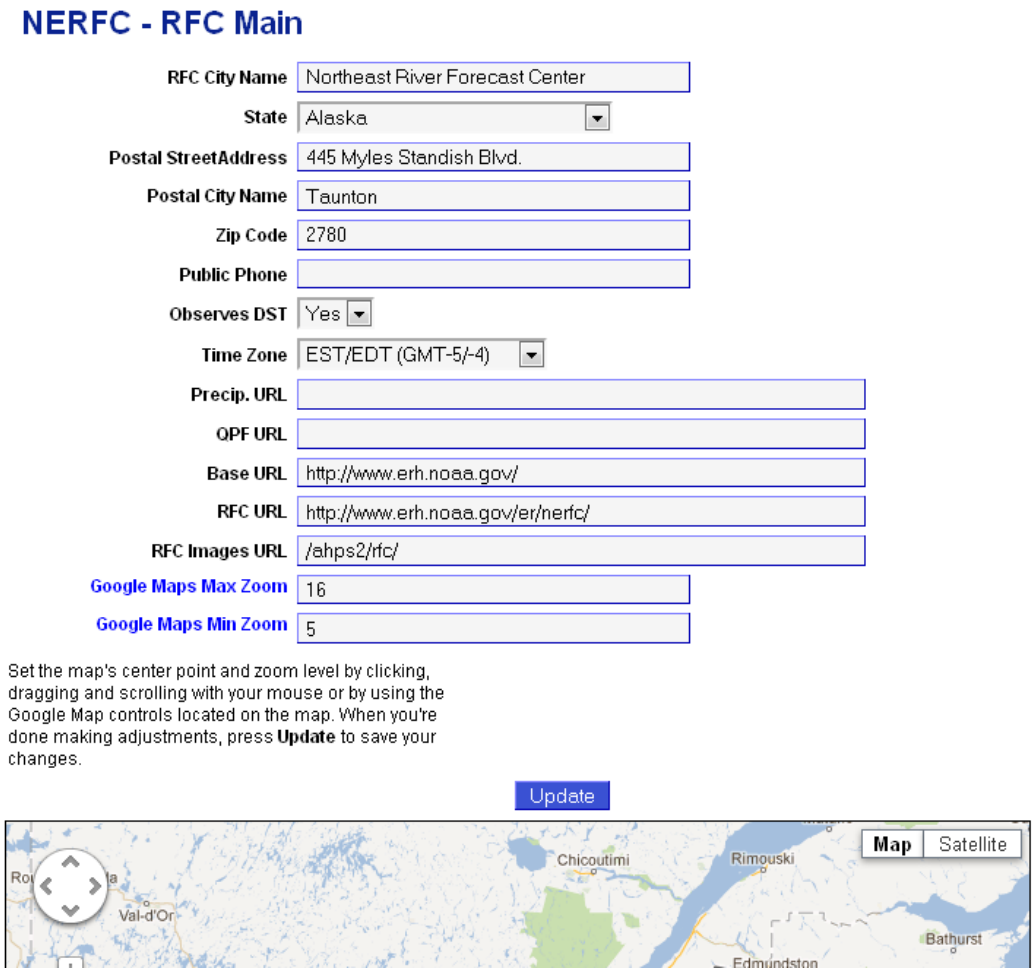
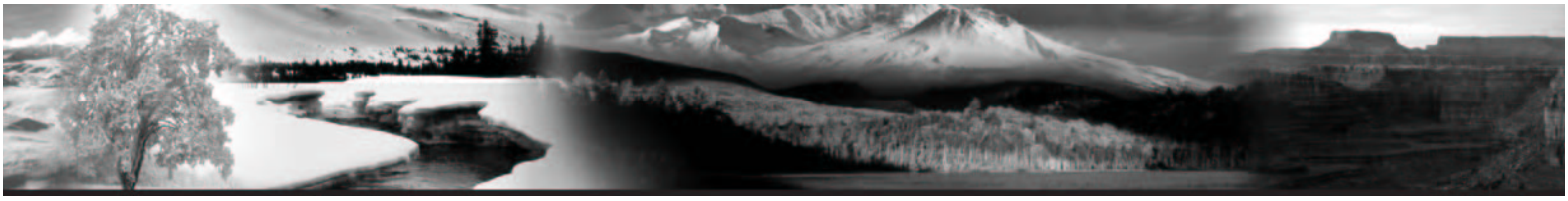
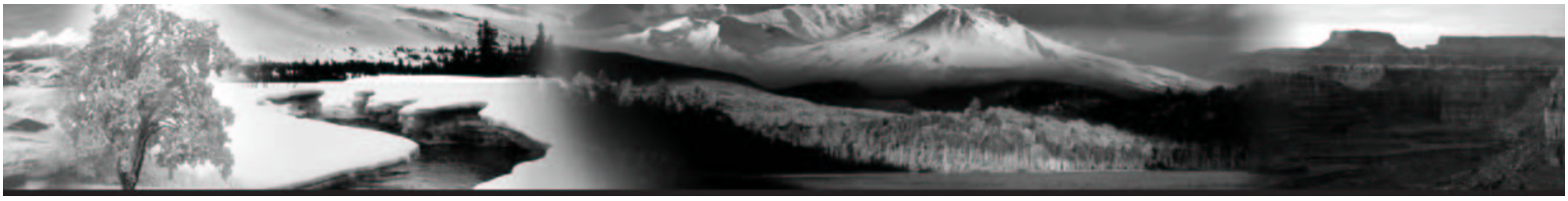


Figure D-10: RFC Main Page Editor

Configuration Item	Remarks
RFC City Name	Text entry box where users can spell out the name of the RFC
State	Dropdown selection box where users can select what state the RFC resides within
Postal/Street Address	Text entry box where users can enter the Postal or Street Address that will be displayed on the RFC Main Page
Zip Code	Text entry box where users can enter the ZIP code for the RFC
Public Phone	Text entry box where users can enter a phone number to display on the RFC Main Page



Observes DST	Dropdown selection box that provides users with the option to choose whether or not the RFC observes Daylight Savings Time. Options are "Yes" or "No"
Time Zone	Dropdown selection box that allows the RFC to be assigned to a particular Time Zone. This will allow time to be displayed correctly on the RFC Pages.
Precip URL	Text entry box where users can enter the URL for a particular Precipitation Page that will display as link on the RFC Page
QPF URL	Text entry box where users can enter the URL for a particular QPF page to be displayed as a link on RFC Page
Base URL	Text entry box where users can enter the base URL for the location of the RFC Page such as http://www.erh.noaa.gov
RFC URL	Text entry box where users can enter the actual URL for the location of the RFC Page on the server.
RFC Images URL	Text entry box where users can enter the location/directory of the images that are to be displayed on the RFC Page.
Google Maps Max Zoom	Text entry box where users can enter a value from 1 to 20 to how close public users can zoom into the RFC map, 20 being the closest.
Google Maps Min Zoom	Text entry box where users can enter a value from 1 to 20 to how far public users can zoom out from the RFC map, 1 being the furthest.
Google Map location	Google Map interface where users can click, drag and zoom to set the default view for the RFCs Google Map.



RSS Page Text

Another feature available to AHPS Administrators is the ability to edit the text that is listed on the RSS Products Page. **Users will need to know how to edit within html to enter the information into the text boxes for the respective areas on this page.** If you are unsure about any of this please contact the AHPS CMS Support Team.

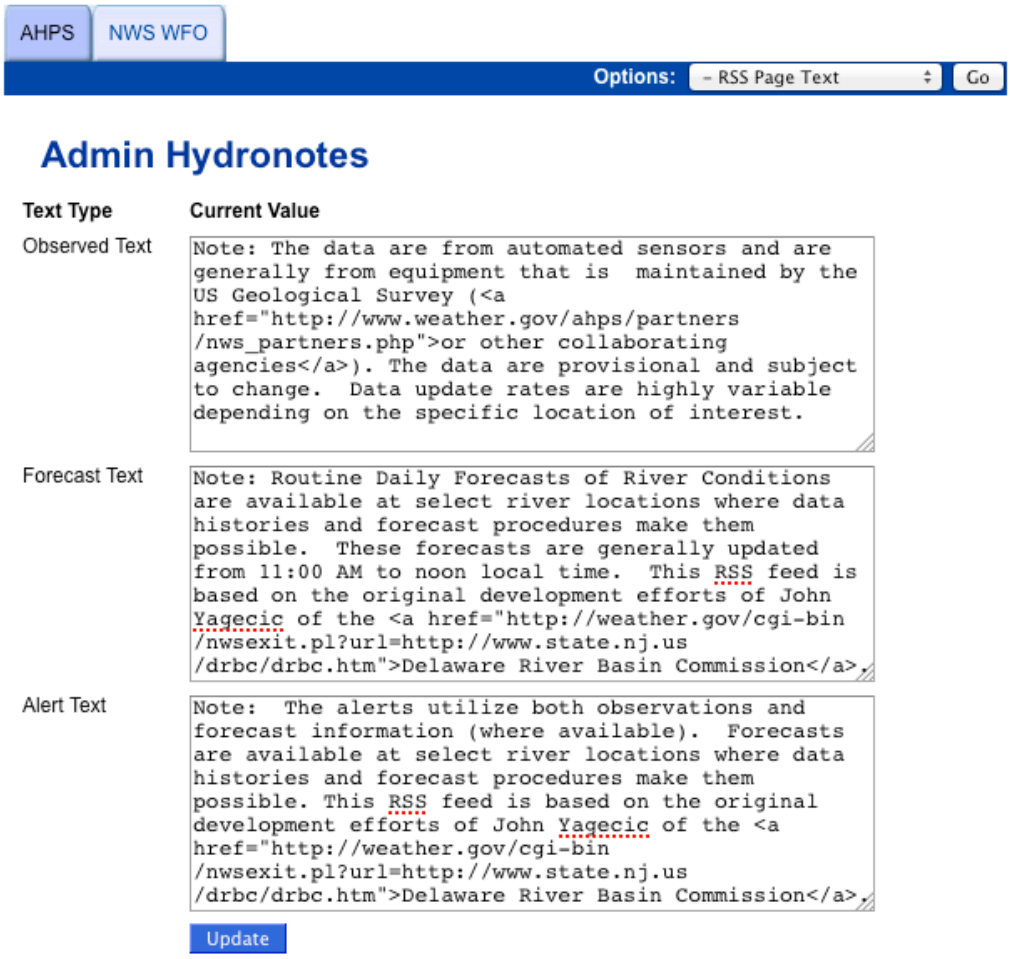
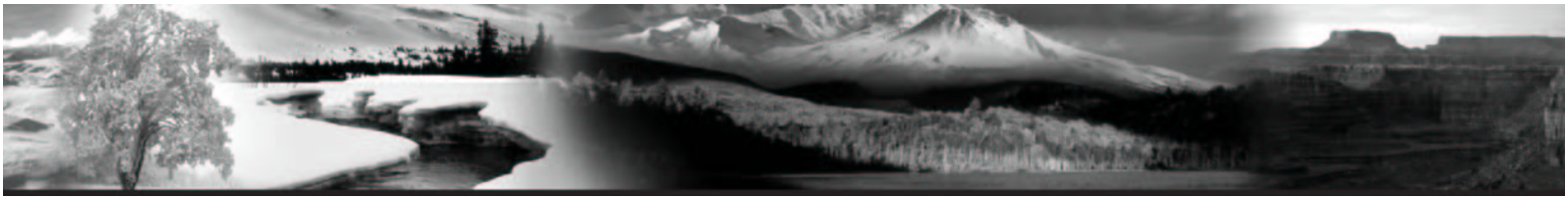


Figure D-11: RSS Page Text Editor

Users can edit the Text that appears in the Observed Values Text, The Forecast Values Text and the Alert Text that are generated with each RSS Product.



Warnings

The Warnings selection within the Options dropdown selections menu is where AHPS Administrators can adjust the Font Color for any of the Warnings that are displayed at the top of HSA Pages and the color bar above Hydrographs. Should a color need to be changed, users simply need to enter the Web color-code for the font color they wish to use with a particular Warning and click Update. See ***Figure D-12*** below.

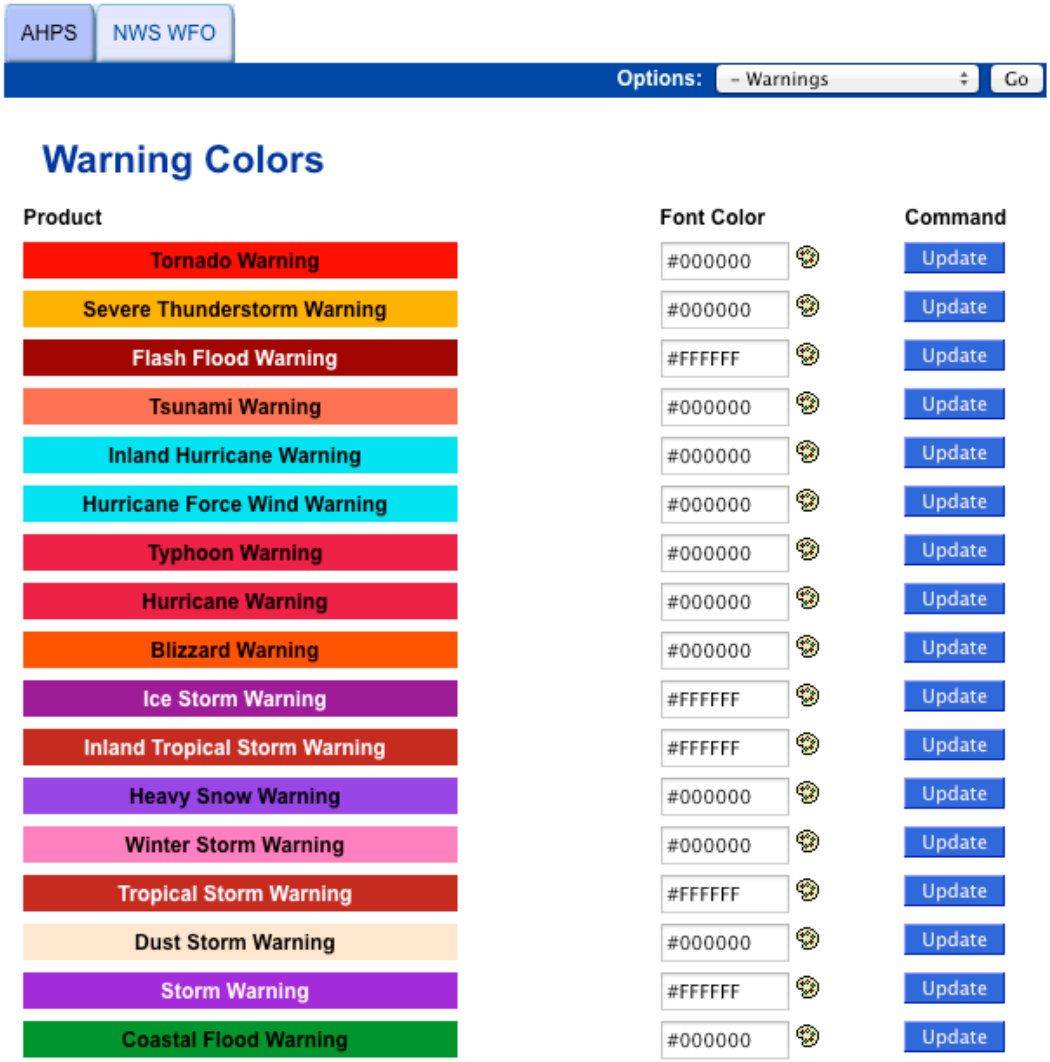
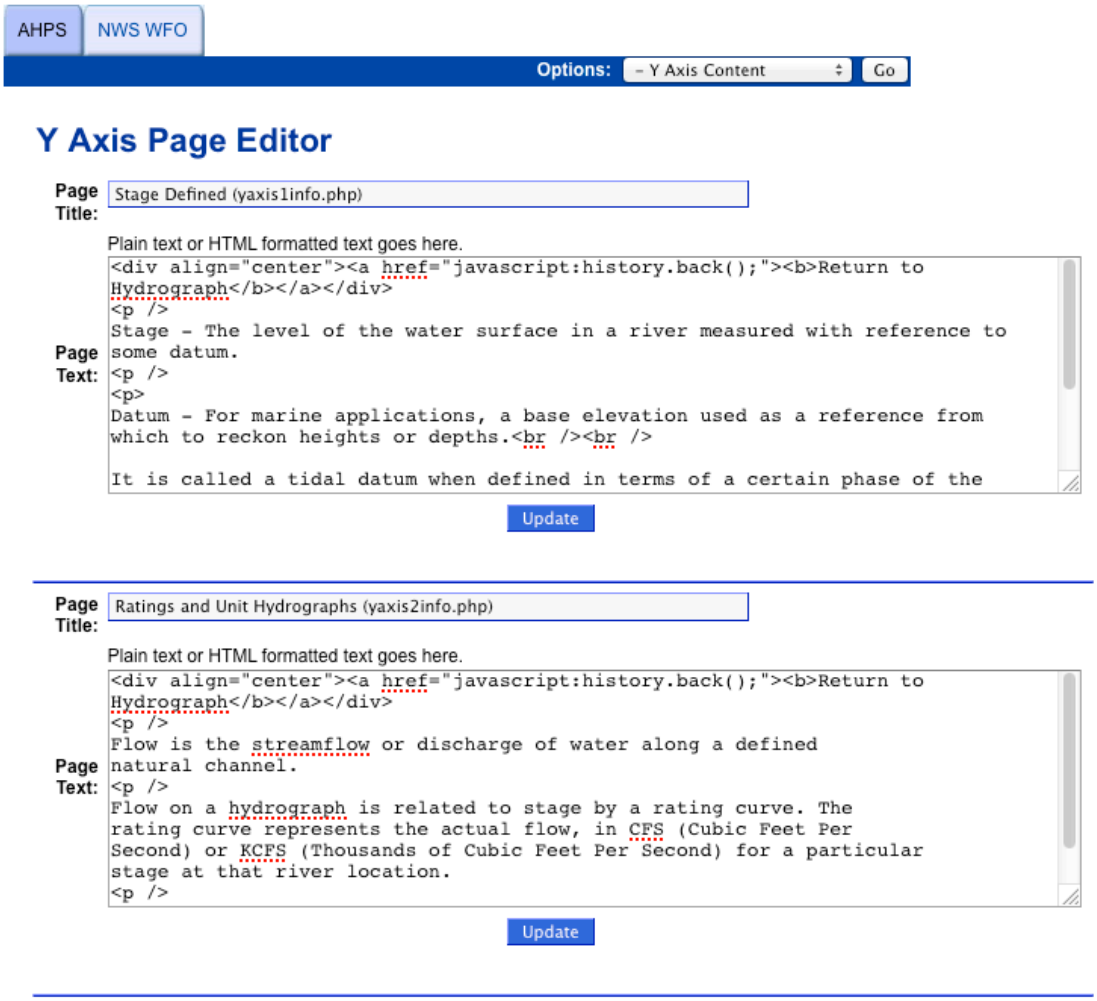


Figure D-12: Warnings Color Edit Page

It is suggested that these be left untouched unless an approved change for a color has been made.

Y-Axis Content

The final item to cover within the "Options" dropdown selection box before a HSA is selected is the Y-Axis Content Editor. This item allows AHPS Administrators to edit the page content associated with the links located in the Y-Axis of the hydrographs (Stage and Flow). **Users will need to have knowledge of HTML to edit this area.** If you do not have knowledge of HTML you should contact the AHPS CMS Support team. See ***Figure D-13*** below.



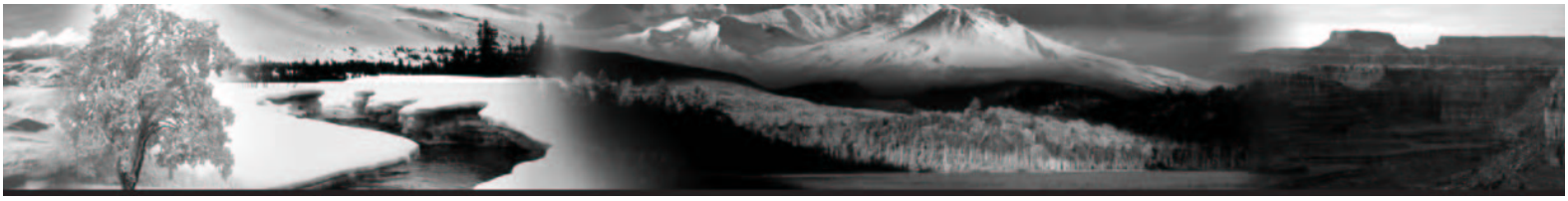


Figure D-13: Y-Axis Content Editor Page

Compass

Once an AHPS Administrator selects a HSA to configure, the Options dropdown selection menu will change slightly as previously mentioned. Compass is an option that will still be present once a HSA is selected. If Compass is selected it will look as if users have redirected back to the "Select HSA Page". Once here users can select what HSAs AHPS Compass they would like to edit. Once they have chosen a HSA, they will be directed to a page that looks like ***Figure D-14*** below.

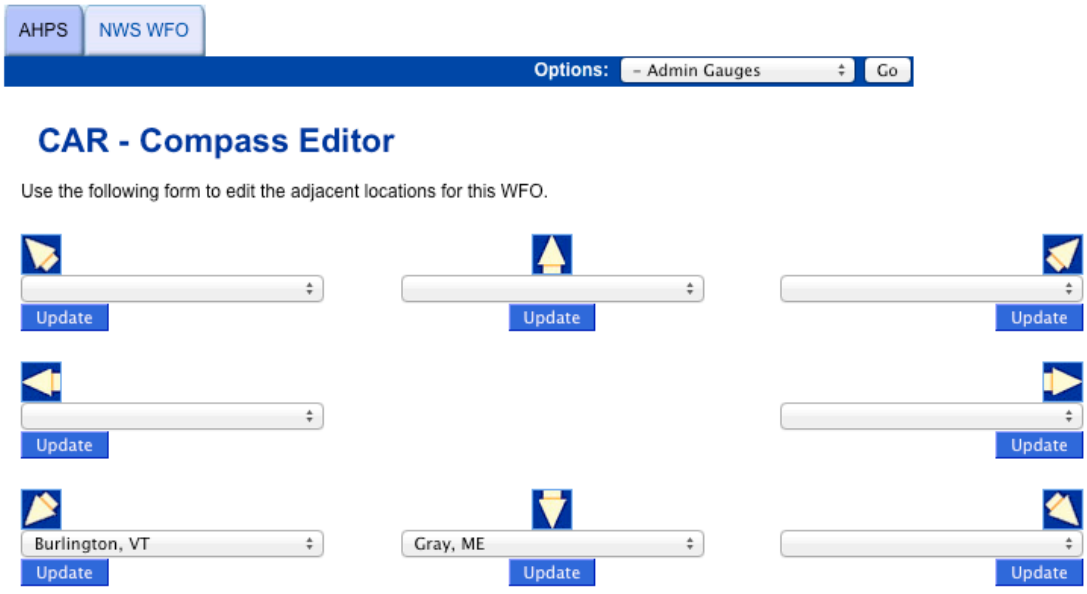
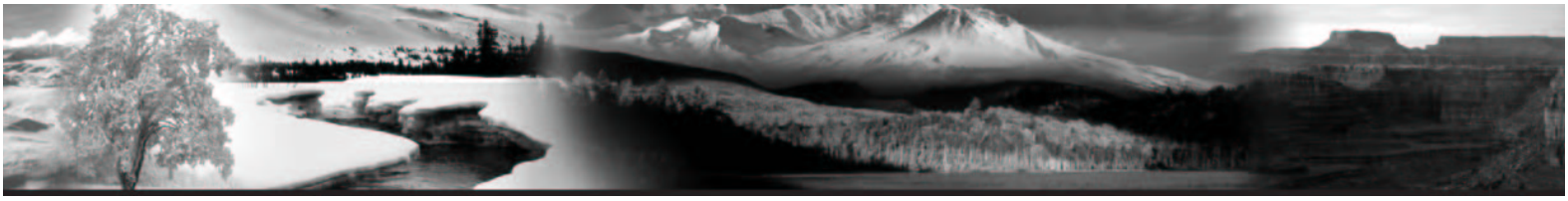


Figure D-14: Compass Editor Page

Once on the Compass Editor Page, users can change or add additional navigational arrows by selecting the desired HSA for that particular direction from the dropdown selection box and clicking  when done choosing for that particular direction.

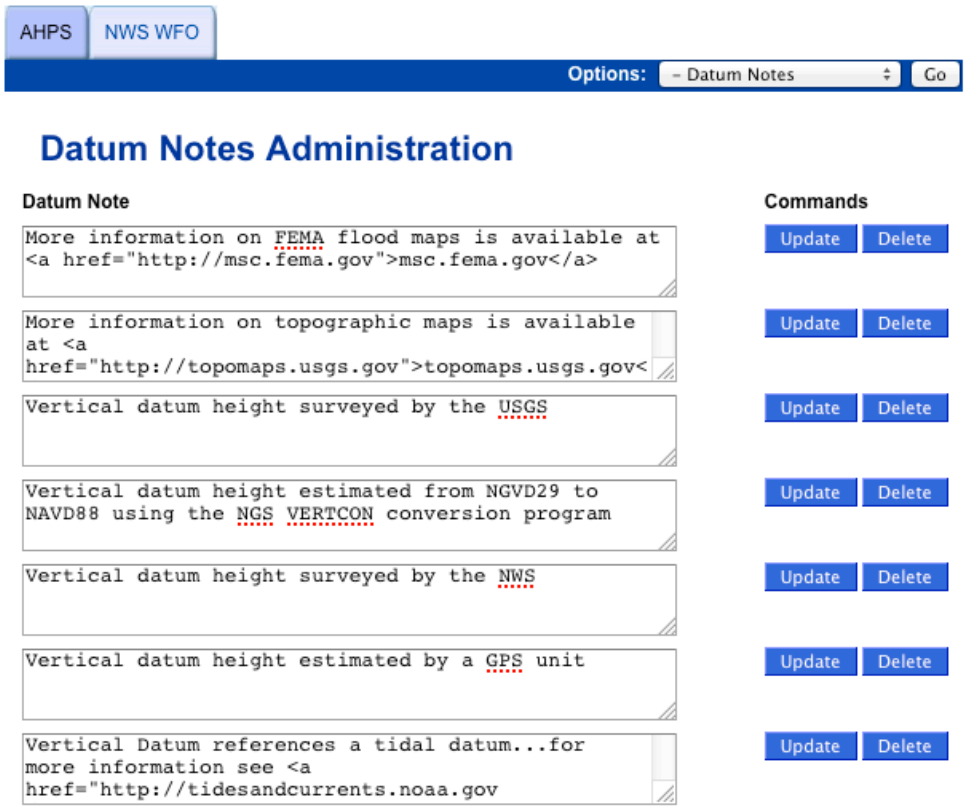


Datum Notes Administration

Should a Datum Note need to be edited or a new one added AHPS Administrators will complete that task via this selection. Once on this page, users can edit the information of an existing note within the text box by simply editing the text. If a link needs to be added/adjusted within a note, it will need to be input as HTML. For example a link to FEMA Flood Maps that displays only as **msc.fema.gov** on the webpage should be input as the following:

msc.fema.gov

Once an existing note has been updated users will click Update to complete the change. Users can also remove a note entirely by clicking Delete. To enter a new note users should input the desired note information in the very bottom blank text entry box and click Add when finished.



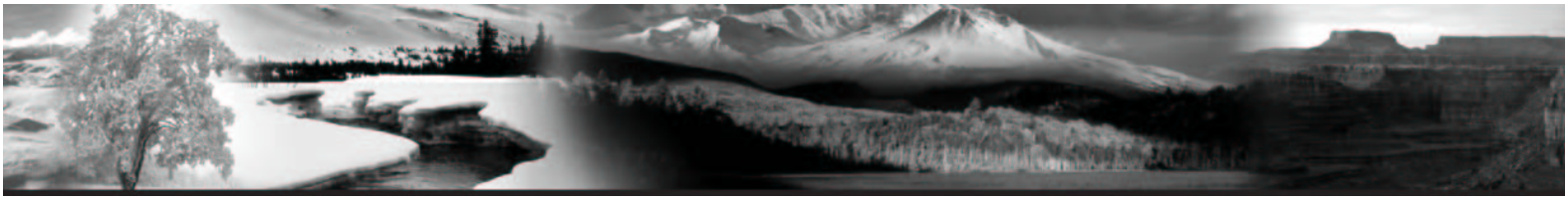
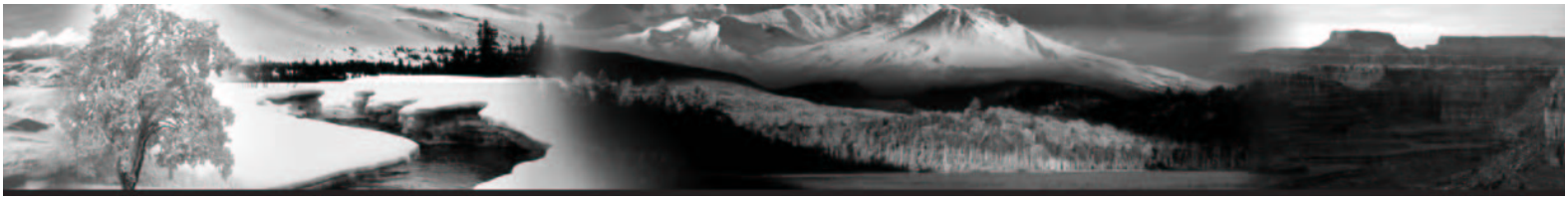


Figure D-15: Datum Notes Administration Editor Page



Globals

The Globals Page manages the content associated with information that is displayed within the Blue Left-hand Navigation Area on "All" AHPS Pages. This information has to be edited via plain text or formatted HTML entries. Each editor section within the page explains what area of the interface is controlled by the input of text input box. In addition to the Left-hand Navigation Area, HSA Map Special Messages can also be entered on this page to help notify the public users of an upcoming release, maintenance, or any particular message. The "Other Information Page" also can be toggled via Yes/No dropdown selection. This determines if it gets displayed on the National Page from this selection.

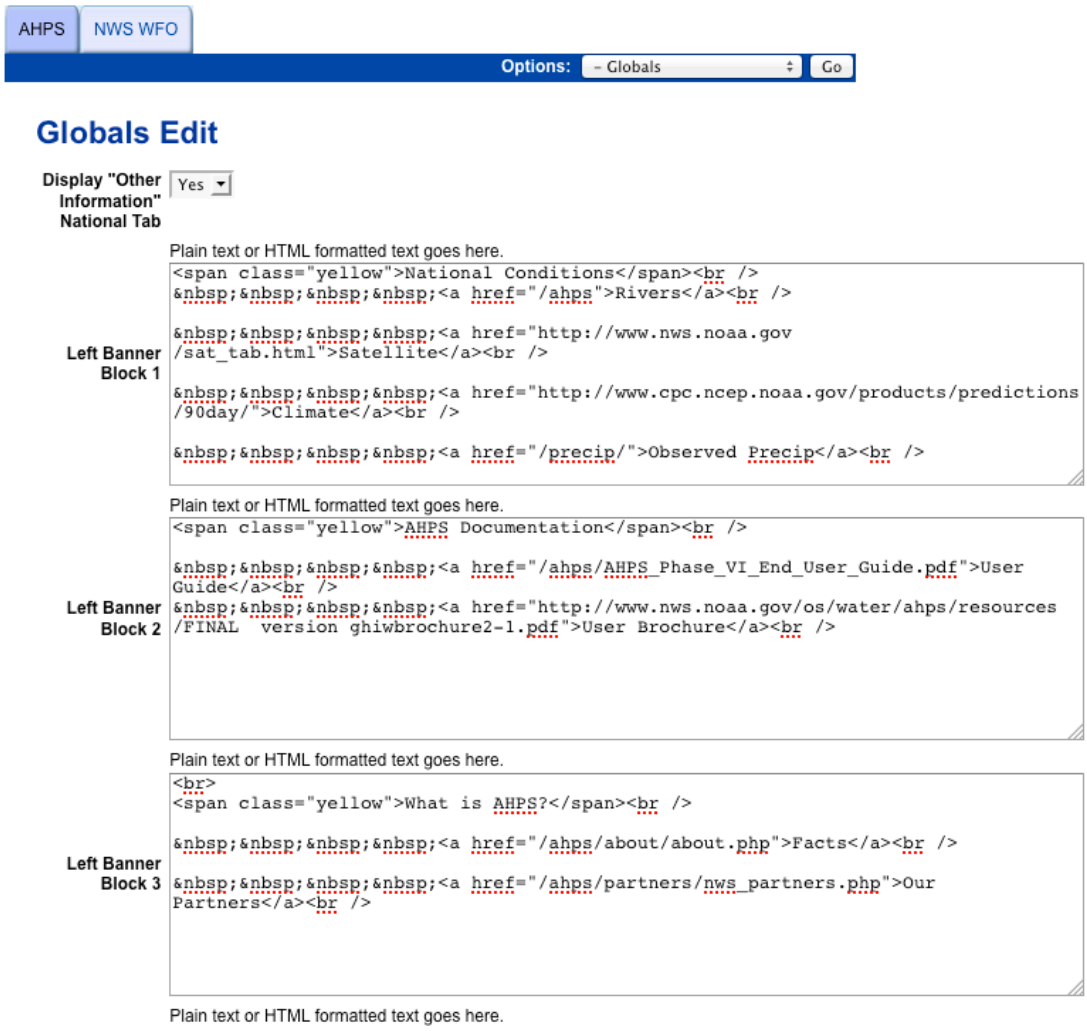
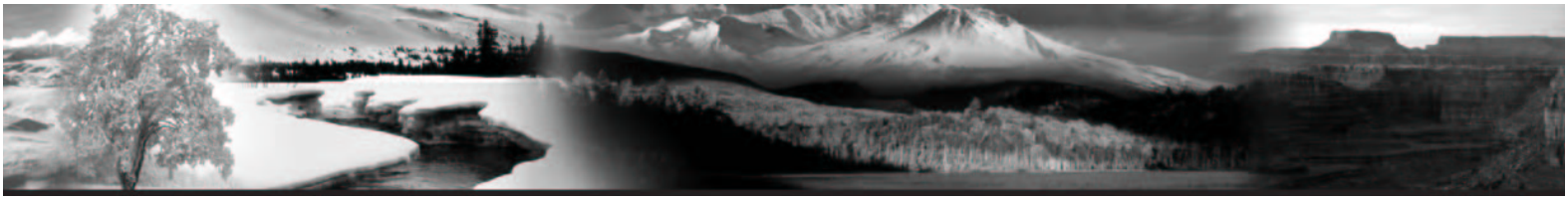


Figure D-16: AHPS Globals Editor Page



Hydronotes

In the past, Hydronotes had to be submitted by Service Hydrologists to the Region Hydro Focal Point and then past on to the AHPS CMS Support Team to be added manually to a file. With the addition of this selection for AHPS Administrators the Regional AHPS personnel could now control these messages. To Add, Edit or Delete a Hydronote, users simple would need to click Hydronote in the Options dropdown selection menu. They will be directed to the page displayed below in ***Figure D-18***.

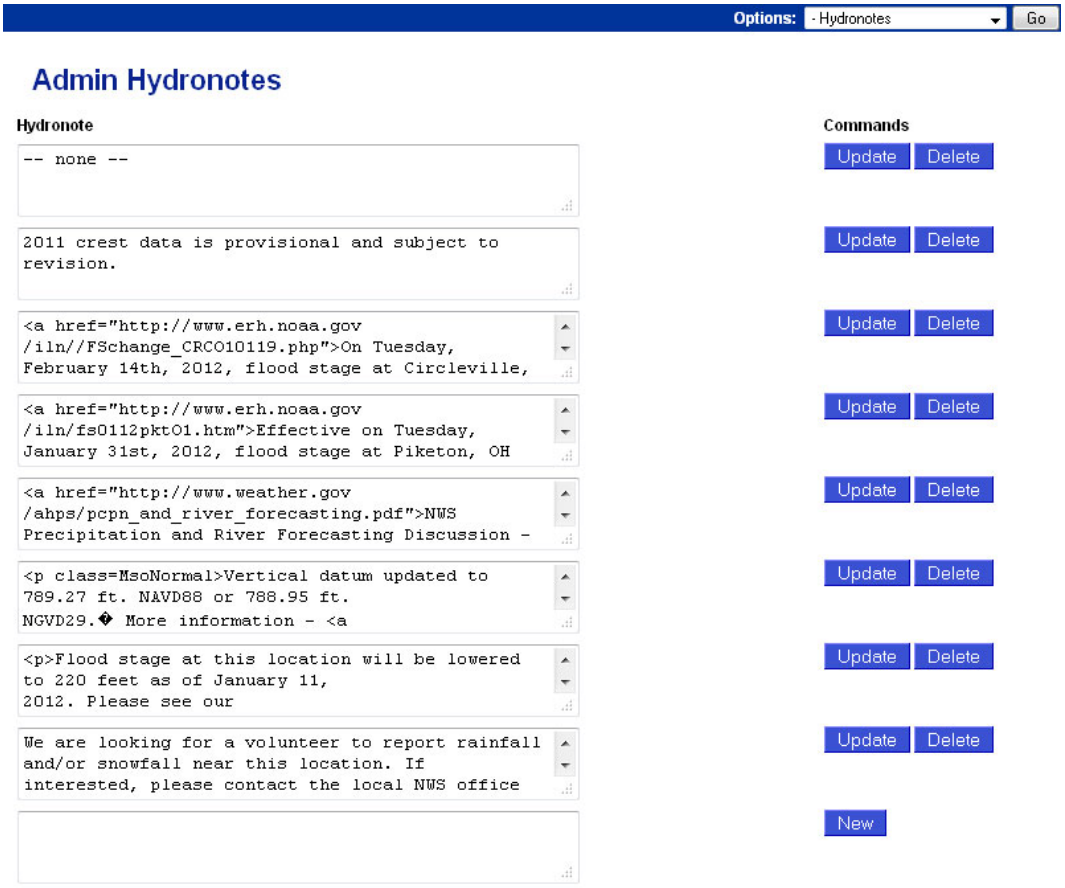
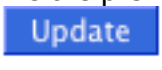
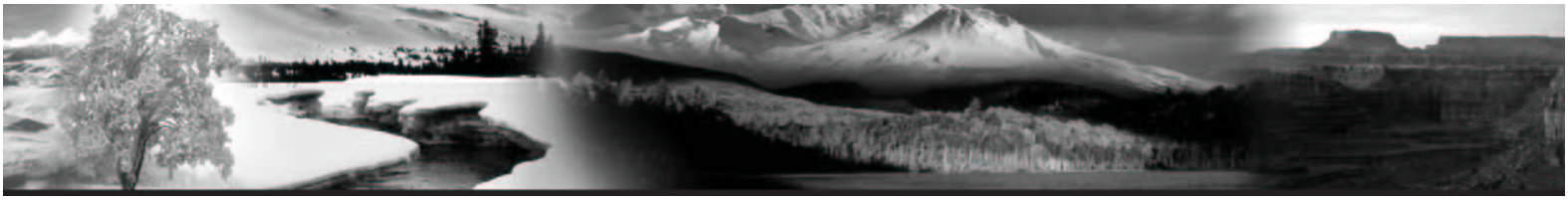


Figure D-18: Hydronotes Editor Page

Just like the previous note editors, once an existing note has been updated users will click 

to complete the change. Users can also remove a note entirely by



clicking Delete. To enter a new note users should input the desired note information in the very bottom blank text entry box and click Add when finished.

Global Inundation Messages Editor

Just as with the other global message editors these text entry boxes except HTML formatted information and drive the respective messages that each box is labeled with on the AHPS Inundation Pages:

About Inundation
Inundation FAQ Text
Print/Save Image Alert Text

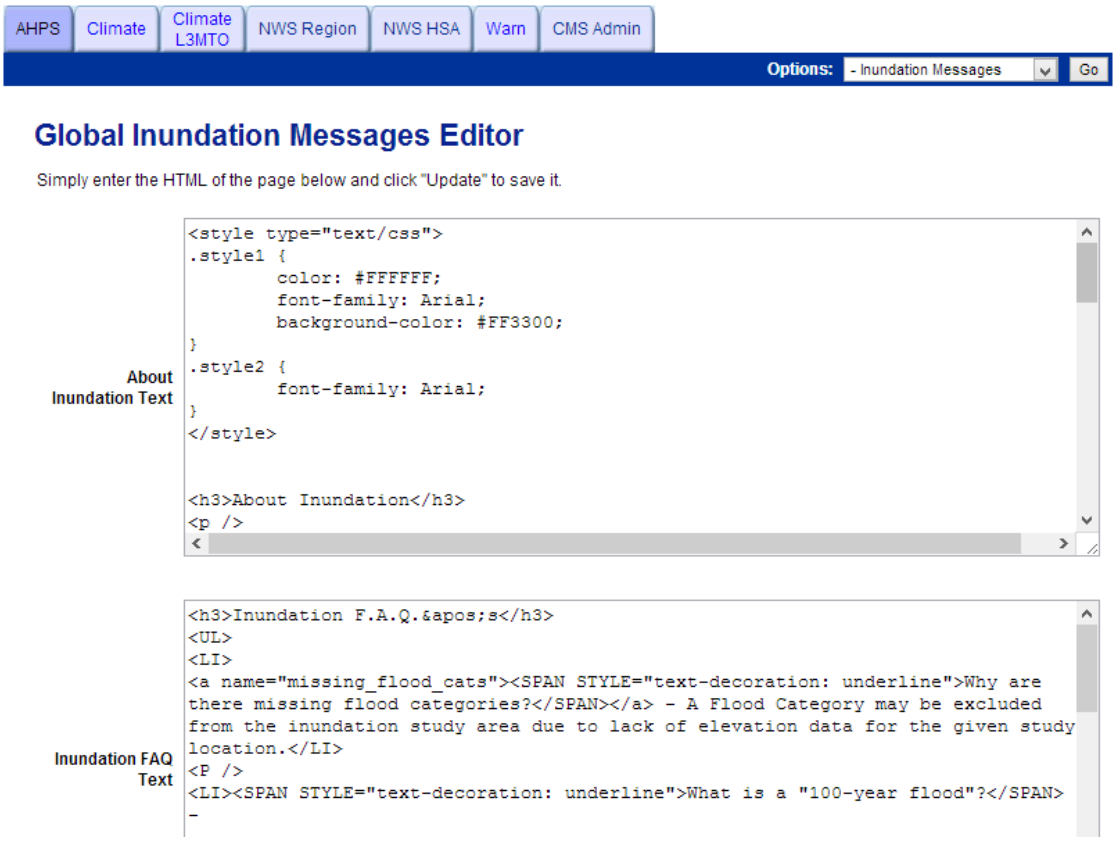
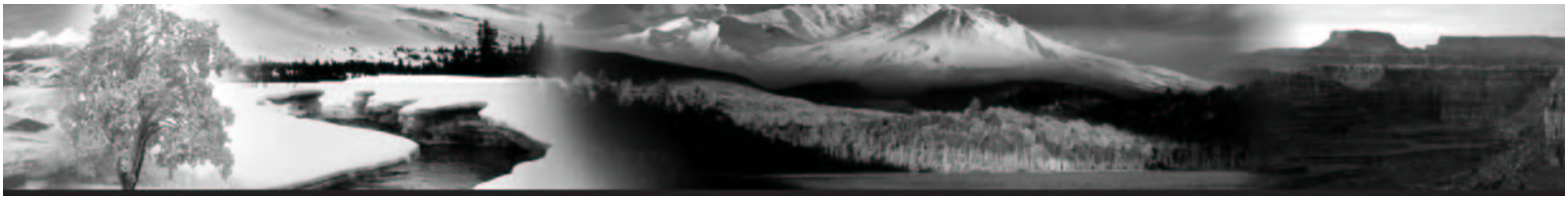


Figure D-19: Global Inundation Messages Editor

Once users have updated the desired content they will click 

to finalize the changes that were just made.



Changelog

The final item to be covered in this Admin Guide is the Changelog. This can be a very handy tool for AHPS Administrators to use for troubleshooting issues that suddenly occur on a HSA's AHPS webpage. Once this selection has been chosen from the "Options" dropdown selection box, users will be presented with the page displayed in ***Figure D-21***. Once on this page users can select one of the dates listed to view the changes that were made to the HSA's AHPS configuration on that particular date.

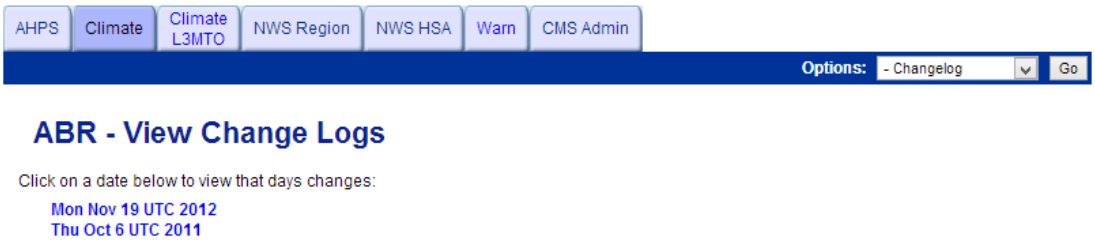


Figure D-20: Changelog Date Selection Page

An example of what AHPS Administrators will be presented with after a date has been selected can be viewed on the next page in **Figure D-22.** The information will inform the Administrator who made the change, what time they made the change and what change was exactly applied.

Figure D-21: Sample of Changelog

This concludes the AHPS CMS Administrator's Guide