NWSTC

HPM Job Sheets

A Supplemental Resource for the HPM Course

Note: This collection of job sheets has not been updated in some time, but still contains good information for HPMs. These documents are scheduled for updates in the next year.

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Add a New Gage to HydroBase

Add new gaging locations to HydroBase for use in other hydrologic applications.

Step	Action - AWIPS	Notes
1	Left- click on the background and highlight AWIPS start-up menu.	
2	Select “Hydro Apps" then select "Hydro Database Manager"	This launches the HydroBase application
3	From the **Location** pull down, select **Add Location**.	
4	In the data entry fields, enter as much information as possible. **Lat/lon is required to define a site!**	Enter County/State, HSA, WFO, and time zone or default values will remain in the database.
5	If the the *shef_load_ingest* token is set to **ON**, skip steps 6-10.	
6	From the Data Ingest pull down, select Ingest Filter.	
7	From the Ingest Filter GUI, click the New button at the bottom of the interface.	
8	Enter the new location id in the Location: box.	
9	Select the Duration, TypeSource and Extremum parameters from the pull-down menus below and	
10	Select the Physical Element from the scrolling menu on the right.	
11	Highlight the Master Switch checkbox is highlighted.	If this is not highlighted, data will not be ingested.
12	**NEVER** click the check boxes to the right of the "Set Switches for All Listed Above" button! This changes all the flags in your database, and you probably do not have a record of them to restore them!	
13	Click the **Apply** and **Ok** buttons to add the data item to the ingest filter.	
14	Add information in the River Gage menu - Flood Category, Impact Statement, Low Water Statement, Flood Damage, Crest History, and Low Water should be set to their proper values.	These must be set for RiverPro to work properly.
15	From the River Gage -> Unit Hydrograph menu, define a hydrograph for the location.	Contact the gage owner for a hydrograph. This must be set for SiteSpecific to work properly.
16	From the Location menu, add optional information to the Contacts, County/Zone UGC, Gage History, and Data Sources menu.	

Locate “New” Gages

The Hydrometeorological Automated Data System (HADS) collects information, including hydrologic information, from data collection platforms (DCPs). Check the HADS page occasionally to find “new” gages – ones transmitting data, but not being utilized at your office.

STEP 1 Open the “New” Gages Section of HADS

Step	Action	Notes
1	Open a web browser session and navigate to: http://www.nws.noaa.gov/oh/hads/	
2	Choose one of the following methods from the left hand menu to locate the gages - map interface or a list of gages.	

Step	Map	Step	List of New Sites
1	On the left hand menu, under the Google Map Displays, click **‘New DCP’ Locations**.	1	On the left hand menu, under RealTime Pages, click **Active New DCPs**.
2	Click on the map near your HSA. Use the Google Map tools to zoom to the area.	2	Scroll through the list (alphabetized by state) to locate sites in your HSA.
3	Click on the red icon for basic information on the site. Map contains basic information (owner, NESDIS, lat/lon, location description).	3	Click the NESDIS ID for more a map of the gage location. In addition to what the map has, the list provides the transmit interval, DCP type, shef code of the data transmitted, and the Julian date of the metadata.

STEP 2 Contact the Gage Owner

Step	Action	Notes
1	Contact the gage owner for additional information.	For example, the USGS publishes Station Descriptions for all of their gaging locations.

Apply for an NWSLI Site Identifier

After locating new gages on the HADS page, apply for a site identifier on the NWSLI page.

Step	Action	Notes
1	Open a web browser session and navigate to https://ops13web.nws.noaa.gov/nwslimain/nwsli_home.main	
2	Click the **User Interface** link.	
3	Enter the username and password. username: **john.doe** password: **ldap_password**	
4	Select **Query Station Information**.	Make sure the SID you want is not already used.
5	After determining the SID is not in use, click **SID Transaction Form** the on the left hand menu.	
6	Populate the fields in the interface and submit the request.	

Add a New Location to AHPS

STEP 1 Setup Station in HydroBase

Step	Action - AWIPS	Notes
1	Enter all available data for the station in HydroBase.	
2	Click **Setup: HydroGen Configuration**.	
3	Fill in the information for the new locations and click **Save**.	Be sure to include all possible gage type/sources.
4	Open up a terminal window and type: **/awips/hydroapps/precip_proc/bin/run_create_mpe_gage_file**	Only for sites with precipitation data

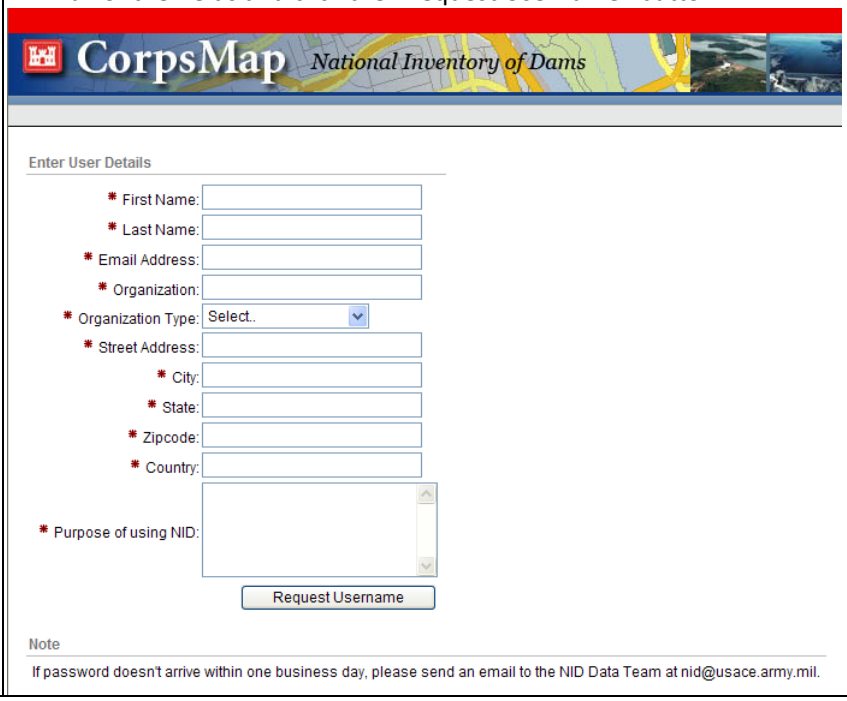
STEP 2 Setup Station in AHPS CMS

Step	Action - Browser	Notes
1	Type the following URL in the address bar of a browser. https://nwscms.weather.gov/nwscms/index.php?p=login	
2	Click **AHPS** and select the HSA.	
3	For a new river, select **Options**: **Admin Rivers** and click on the first letter of the new river name.	If the river exists, skip to Step 5.
4	Enter river name in the blank box and click **New**.	
5	Under **Options**, click **Admin Gages**.	
6	Fill in the location ID and click **New**.	
7	Complete the first section and click **Update**.	
8	Click **Edit HSA Plot**. Fill in the data and click **Preview**. When edits are complete, click **Update**.	
9	Click **Edit Up/Down Streams**. Edit as needed and click **Update**.	
10	Click **Edit HydroGen** and select **Update**.	
11	Click **Edit Inundation** and change "Enable Inundation" to **Yes**, and click **Update**.	Only for sites with inundation maps.
12	Click **Edit Datums**, fill in the information, and click **Update**.	
13	Enter the location's Zone and FIPS codes one at a time in a blank box and click **New**.	
14	Upload photos (optional) by clicking **Click Here**. • Log on to the server, select your office, and the gage location. • Select **Browse** and click **Preview**. • Check the "Edit Gauge" page in 20 minutes. You should see a thumbnail of the photo. • Fill in a caption and click **New**.	**Do not** do this during a server upgrade!
15	Select **Options: Dropdown Navigation**. For new groups, fill in the bottom box and click **New**. To place it in an existing group, click **Edit**.	
16	Select the new river at the bottom box and click **New**. Change the **Display Order** numbers and click **Update**.	
17	Click **+** or **-** to set the default zoom and select **Update**.	
18	Log off and check the AHPS page.	

Access and Use the National Inventory of Dams

Use the following procedures to access the National Inventory of Dams and download data for dams in your hydrologic service area.

STEP 1 Apply for a NID User Account

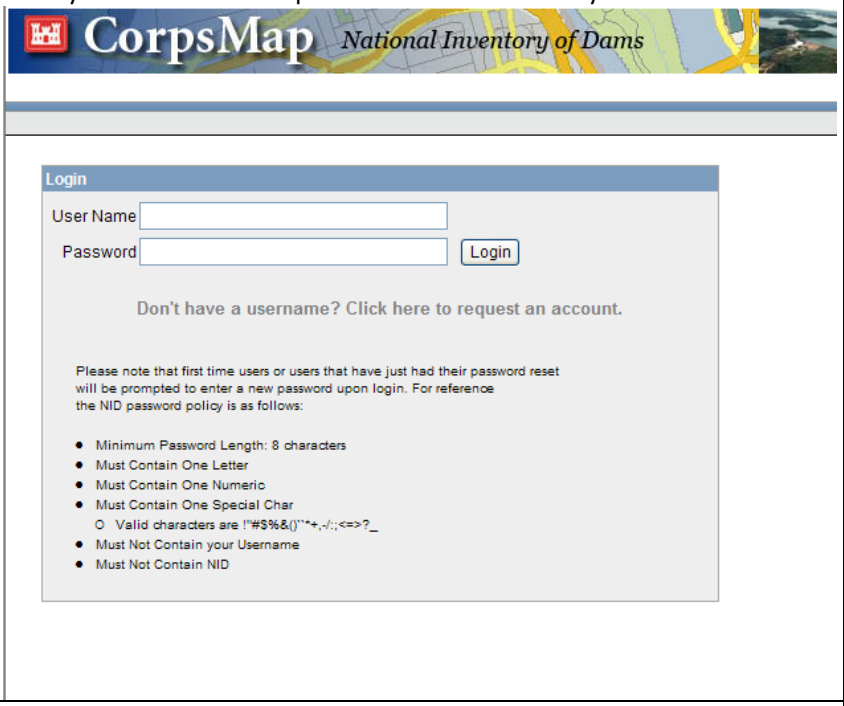
Step	Action	Notes
1	Open a web browser session and navigate to https://nid.usace.army.mil/	
2	Click the “Enter the National Inventory of Dams” link at the center of the page.	
3	At the top right, select the “Login here for full access” tab.	
4	Click the link below the data entry fields to request an account.	
5	Fill in all of the fields and click the “Request Username” button. 	

STEP 2 View NID Data

Step	Action	Notes
1	Open a web browser session and navigate to https://nid.usace.army.mil/	
2	Click the “Enter the National Inventory of Dams” link at the center of the page.	
3	At the top right, select the “NID By State” tab.	
4	From the drop down menu, select a state.	
5	View information on hazard potential, EAPs, location, etc.	

STEP 3 Download Data from the NID

Recommendation: Check this information against AWIPS Dam Catalog. If you notice discrepancies, contact WHFS Support and ask for a new download.

Step	Action	Notes
1	Open a web browser session and navigate to https://nid.usace.army.mil/	
2	Click the "Enter the National Inventory of Dams" link at the center of the page.	
3	At the top right, select the "Login here for full access" tab.	
4	Enter your username and password in the data entry fields. 	
5	Read the terms of use and click the box next to the asterisk.	
6	Click the "Accept" button.	
7	Select the "Downloads" tab.	
8	Choose a two-letter state identifier from the list.	
9	From the "File Download" dialog, choose the "Open" or "Save" option for the file.	To convert from Access format to Excel, right click on the table name and choose "Export", and click "Excel" and follow the steps in the wizard.

Change Flood Stage

Objective: Change the flood stage at forecast points.

Step	Action	Notes
1	Document flood events and times the stage exceeded flood stage but no flooding occurred **or** flooding occurred before flood stage was reached.	
2	Locate roads potentially affected by flooding.	
3	Coordinate with the gage owner, flood plain manager, and the Emergency Manager to discuss changing the flood stage.	Specifically mention the roads in Step 2 during these discussions.
4	Contact the RFC about the proposed changes. List specific events and locations when speaking with the Hydrologist in Charge.	**Do not** proceed if the RFC objects to the change.
5	Submit a written request to the gage owner and Regional Headquarters. Include: • Names/titles of the gage owner, flood plain manager, Emergency Manager, and Hydrologist in Charge • Supporting documentation	
6	Visit the new gage site and survey to help establish a new flood stage.	
7	Add/update the site in HydroBase .	
8	Send a copy of the E-19 to the RFC and regional HSD.	
9	Coordinate with the affected hydrologic users (Emergency Managers, other hydrologic agencies, and media).	
10	Put a public information statement (PNS) on the NWS website and NWR announcing the new service.	
11	Alert the media with a press release.	

Set a Station to Inactive

Stations may stop reporting seasonally, or may lose funding. Set the station to inactive in HydroBase to keep missing values from appearing on HydroView.

Setting Stations to "Inactive"

Step	Action	Notes
1	Open HydroBase.	
2	Select the station.	
3	From the pull down menu, select "**Location**" > "**Modify Location**".	
4	To the right of the "Location" box, toggle the "**Inactive**" flag "**ON**".	
5	Click the "Page" pull down box in the "**Modify Location**" window.	
6	Select "Additional Info".	
7	Below the "**Station Type**" box, toggle **OFF** the "**Post Observed Values**" flag.	

Reactivating a Site

Use the following instructions to reactive a seasonal gage or a gage with renewed funding.

Step	Action	Notes
1	Open HydroBase.	
2	Select the station.	
3	From the pull down menu, select "**Location**" > "**Modify Location**".	
4	To the right of the "Location" box, toggle the "**Inactive**" flag "**OFF**".	
5	Click the "Page" pull down box in the "**Modify Location**" window.	
6	Select "Additional Info".	
7	Below the "**Station Type**" box, toggle **ON** the "**Post Observed Values**" flag.	

Request a New Forecast Point

Request forecast service for locations with increased populations at risk or changes in land use. Begin request process as soon as possible. The region needs at least 90 days' notice to file the Technical Implementation Notice (TIN) and Service Change Notice (SCN).

STEP 1 Research

Step	Action	Notes
1	Contact other water resource agencies to determine if there is an existing gage or plans to install one nearby.	
2	Determine the availability of a rating and real-time stages for the site (needed for site-specific).	
3	Ensure a signed Memorandum of Understanding (MOU) exists if the gage is an expansion of a local flood warning system.	

STEP 2 Submit a Written Request

Step	Action	Notes
1	Obtain a written request from a stakeholder, such as a county Emergency Manager.	
2	Coordinate with the stakeholder on the wording of the request.	
3	Ensure the request: • Contains specific information on why forecast service is needed, such as the number of people at risk • Mentions equipment at the site or funding for installation • Is addressed to either the Meteorologist in Charge at your office or the Hydrologist in Charge at the servicing River Forecast Center	

STEP 3 Establish a Flood Stage

Step	Action	Notes
1	Contact Emergency Managers, USGS, COCORAHS observers, and others for feedback on flooding near the gaging site.	
2	Check FEMA maps and county GIS maps for areas likely to flood.	
3	Survey the new gage site.	

STEP 4 Coordinate with the River Forecast Center

Step	Action	Notes
1	Provide the information you have to the RFC and obtain a list of other needed information.	
2	If the gage site can be used and a flood stage has been determined, then submit another written request.	
3	Send a written request/letter through the MIC/HIC to the Regional, Hydrologic Services Division (HSD) with comments as to their assessment of the need for the service.	

STEP 5 After Approval

Step	Action	Notes
1	Request a National Weather Service Location Identifier (NWSLI).	
2	Add the new site to HydroBase.	See the WHFS Support page for instructions.
3	Create an E-19 and send a copy to the RFC and regional HSD.	
4	Contact the affected hydrologic users (e.g., emergency managers.	
5	Put a PNS on NWR and on the office web page.	
6	Include a “call to action” announcing the new forecast point on hydrologic products.	
7	Alert the media in the city, and give them your prepared press release.	