

## DamWatch Client Definitions:

A –

### Admin Interface

The layout of administrative features, graphics, and textual controls that determine the way the DamWatch **system** interacts with **users**. Only **users** with administrative privileges are able to access the Admin Interface.

### Alert

An automated communication by the system to the appropriate **users** when a **warning** has been issued or an **event threshold** has been exceeded. An alert **notification** is transmitted to a **user** via text, email or fax.

### Algorithm

A computer program (or set of programs) that is designed to complete a specific task or make a specific calculation. DamWatch uses several algorithms for processing data and data set.

### Attachment

A picture, document, plan, audio file, or video that that has been uploaded into the DamWatch system. An attachment can be linked with a structure, ticket, group, or hurricane advisory.

B –

### Basin-of-influence

A defined watershed boundary related to a structure's location.

C –

### Contact Type

The communication medium (cell phone, pager, facsimile machine, email address) to which the DamWatch system will deliver **notifications**.

D –

### Dam

A barrier that has the ability to impound water or any other liquid materials. Most dams are designed for flood control, grade stabilization, water supply or reaction purposes.

### Data Source

A source from which DamWatch accesses information for processing. DamWatch accesses external data sources to extract real-time information from the National Oceanographic and Atmospheric Administration (NOAA) and National Weather Service (NWS), the United States Geological Survey (USGS), and Natural Resources Conservation Service (NRCS). The Data Sources buttons are located in the **interface** and enable **users** to select information about structures, **users**, and official real-time meteorological, hydrologic, and seismologic sources.

### Device

A **data source** that is specific to a particular client.

E –

Emergency Action Plans (EAPs) or Emergency Operations Plans (EOPs)

A single-source document that provide guidelines on how to response to an uncontrolled release of water from the **dam**. The objectives of these plans are to mobilize a pre-planned response and to initiate community actions to ensure public safety.

Event or Critical Event

An occurrence whereby a measured quantity (precipitation, river flow, snow melt, storm surge or seismic activity) has exceeded a predetermined **threshold** from a monitoring **data source**. The result is a corresponding **alert** and the generation of a **Watch List** within the system.

F –

Filter Tool

A feature that a **user** can employ to sort data contained in a list in the **Interface**. The **user** has several different conditions to define their filter and can apply a number of different rules.

Flash Flood Warning (FFW)

A Flash Flood Warning can be issued by either the Weather Service Forecast Office or a National Weather Service Office, depending on which office has **warning** responsibility for that area. A Flash Flood Warning will be issued for single counties or a small group of counties. A Flash Flood Warning is as specific as possible: focusing on communities and areas where flooding is imminent or is already occurring. The **warning** will include areas affected, the duration of the **warning**, and brief call-to-action statements to alert the public of safety precautions.

Flood Warning (FLW)

A Flood Warning is issued when a main stem river is expected to rise above flood stage or is already at or above flood stage. This **warning** details crest information for selected sights along that river. A Flood Warning is issued for portions of river basins and not for individual counties.

G –

Gage

A **data source** used to provide information about current surface water conditions at a USGS gage-monitored location.

Gage Detail

A visual representation of **gage**-specific data to the **user** for any **gage** selected by the **user**. Information is provided in a tabular format through a number of windows in the interface.

Geography Filter

**Users** can utilize this filter to select geospatial views to be displayed in the **Geo-Spatial Display**. The different types of geospatial views generally include states, counties, towns, districts/regions, and HUCs (Hydraulic Unit Code).

### Geo-Spatial Display

Part of the system **interface** that displays geospatial views such as static geographic boundaries such as towns, counties, political boundaries, watersheds, **basins-of-influence**, or any other defined areas. Dynamic data sets such as real-time meteorological, hydrologic, and seismologic overlays can also be displayed.

### Groups

Is a collection of **users** grouped together and linked to one or more structures. A group can subscribe to different alert or ticket notifications. Admins of the Group can contact the entire Group via the Messaging feature in the **Admin Interface**.

### H –

#### Help Interface

The layout of the help features, graphics, and textual controls that help a **user** understand how and why the DamWatch system responds to **user** activity. The Help Interface contains definitions, FAQs, supporting documents, and help videos.

#### Hurricane Advisory

An advisory from the NWS regarding a hurricane. The status of a hurricane advisory can be Active, Extracted, Processed, Finished, or Error.

#### Hydrograph

A graph showing the rate of flow (discharge) over time from a specific point on a tributary. The rate of flow is expressed in cubic meters or cubic feet per second (cms or cfs). All **events** are indicated on the graph and information about the event is located to the right of the graph.

### I –

#### Icon

A site marker in the **Geo-Spatial Display** that indicates the location and the **Ticket** status of a structure.

#### Informational Display

A visual display in which detailed information about individual structures, profiles, or gages is published. Detailed information is displayed in a tabular format for ease of **user** interaction.

#### Interface or Main Interface

The layout of the DamWatch system's features, graphic, and textual controls that control how the DamWatch system interacts and responds to **users** and **user's** requests.

### N –

#### NEXRAD

**NEXt-Generation Weather RADar**. NEXRAD is a high-resolution Doppler radar with increased emphasis on automation by the use of algorithms and automated volume scans. NEXRAD releases three precipitation products that can be overlaid on the **Geo-Spatial Display**. These products are the one hour, three hour, and storm-total accumulated precipitation estimates.

## NID Database

National Inventory of Dams. First established in established in 1972, the NID set national standards to document **dams** in the United States and its territories. The database contains various information about specific **dam** attributes, including: location, size, purpose and inspections.

## Notification

An automated communication by the DamWatch system to appropriate **users** when a **warning** has been issued, an **event** threshold has been exceeded, or a **ticket** has been issued. A notification is transmitted to a **user** via text, email, or fax. There are three types of notifications: an **alert** notification, a **warning** notification and a **ticket** notification.

O –

## One-hour Precipitation

This image and data set is produced by the **NEXRAD data source** of estimated one-hour precipitation accumulation on a 1.1 nm by 1-degree grid. This data set is used to assess rainfall intensities for flash flood warnings, urban flood statements, and special weather statements. One-hour precipitation will not display precipitation values more than 124 nautical miles from the radar. A **user** will have to select adjacent radar to determine accumulated precipitation at greater distances than 124 nautical miles.

P –

## Peak Discharge

The peak discharge, sometimes called peak flow, is the maximum rate of flow of water passing a given point (**gage** location) because of a rainfall event or the maximum discharge on a runoff **hydrograph**.

## Product

The results of information extracted from a **data source** and processed to generate a **warning** or **event**. An example of a Product would be NEXRAD **One-hour Precipitation**.

## Profile

A summary of a **user's** specific information as stored and utilized by the DamWatch system. Profiles consist of the **user's** name, product subscriptions, and contact information (i.e. cell phone, fax and email).

S –

## SLOSH

**Sea, Lake, and Overland Surge from Hurricanes**: SLOSH is a model that estimates storm surge height. The Tropical Cyclone Storm Surge Probabilities (P-Surge) estimates the overall chances that a specified storm surge height will occur at a particular location. The probabilities are based on historical data and forecasts issued by the National Hurricane Center.

## SNOTEL

**SNOW TE**lemetry. SNOTEL automated gages are designed to collect and report snowpack and related-meteorological data. DamWatch currently interrogates SNOTEL sites for one main data set: **Snow Water Equivalency (SWE)**.

### Snow Water Equivalency (SWE)

A measurement used to calculate the amount water that will be generated from the melting snow. Snow Water Equivalency is measured in inches and is useful in determining potential water contributions to dam-specific **basins-of-influence**.

### Status

The condition of a structure at any given time while it is being monitored. The status types are “Active,” “Non-active,” and “Silent.” A structure with an “Active” status receives alerts when an **event** threshold has been exceeded. “Non-active” structures were active at one point, but now **scour** conditions no longer exist. All “Non-active” structures are saved in the system. Structures that have a “Silent” status only send alert notifications to selected **users**. “Silent” structures do not appear in the DamWatch **system**.

### Storm Total Precipitation

This image and data set is produced from the **NEXRAD data source**, which estimates continuously-updated accumulated rainfall from the time of the last one-hour absence of precipitation. This data set is used to assess rainfall intensities for **Flash Flood Warning (FFW)**, urban flood statements, and special weather statements. The maximum range of this data set is 124 nautical miles. A **user** will have to select adjacent radar to determine accumulated precipitation at greater distances than 124 nautical miles.

### Subscription

A **User** creates subscriptions to receive alerts regarding particular **events** and/or **ticket notifications**. The possible subscription types are USGS Event, NEXRAD Event, Slosh Event, Seismic Event, Simulated Event, Ticket Change, and Flood Warning.

### System

A term that represents the entire DamWatch software program and service.

T –

### Template

A tool and method employed by USES to facilitate the efficient and accurate management of data between USES and the client. Templates provide a snapshot of a **system** and are formatted in Excel® spreadsheets.

### Ticket

A tool and method to provide information to **users**, schedule work to be performed, and/or document a response to an event. The Ticket types are Informational, Maintenance, Inspection, Monitor, and Breach. Ticket statuses are categorized as Active, Overdue, Closed, Deleted, or Archived. Ticket priority can be High, Normal, or Low. A Ticket **notification** is transmitted to a **user** via text, email, or fax.

### Three-hour Precipitation

This image and data set is produced by the **NEXRAD data source**, which estimates three-hour precipitation accumulation on a 1.1 nm by 1-degree grid. This data set is used to assess rainfall intensities for **Flash Flood Warning (FFW)**, urban flood statements, and special weather statements. Three-hour precipitation will not display precipitation values more than 124 nautical miles from the radar. A **user** will have to select adjacent radar to determine accumulated precipitation at greater distances than 124 nautical miles.

#### Threshold

A predetermined not-to-exceed point for a **data source** that must be exceeded to produce an **event**, which results in an **alert(s)**.

#### U –

#### User

An individual who has been provided access to the **interface** and receives **notifications** through a **user's profile**. The possible access levels of a **user** are USES Administrator, Administrator, User, or Local User.

#### W –

#### Warning

A **Flash Flood Warning (FFW)** or **Flood Warning (FLW)** product issued by NWS local offices indicating that a particular weather hazard is either imminent or has been reported. A warning **notification** is transmitted to a **user** via text, email, or fax for informational purposes as a precursor to a possible **event**.

#### Watch List

A list of structures that have been identified by DamWatch as having **event** thresholds that have been exceeded.