Subject: Upgrade of NOAA nowCOAST GIS Web Mapping Portal  
Effective late September 2018

Effective by late September 2018, the NOAA nowCOAST GIS Web Mapping Portal will be updated on NOAA Integrated Dissemination Program Infrastructure operated by NWS Central Operations (NCO). The new nowCOAST version (V5.2) will feature the following changes:

- New map service to provide maps of oceanographic forecast guidance from the National Ocean Service (NOS) 3-D operational forecast system for the Gulf of Maine (GoMOFS)
- New map service to provide maps of NOS forecast guidance of the marine pathogen, Vibrio Vulnificus (Vv) for the Chesapeake Bay
- Incorporation of water level forecast guidance from NOS Extratropical Surge and Tide Operational Forecast System (ESTOFS) for Micronesia into the existing ESTOFS map service
- Ability to display NWS National Hurricane Center (NHC) Potential Storm Surge Flooding Maps for multiple tropical cyclones at the same time
- Incorporation of the NWS Central Pacific Hurricane Center's (CPHC) new Best Track information for tropical cyclones over the Central Pacific Ocean into the existing tropical cyclone track and intensity forecasts map service
- Addition of a new data layer for NWS/NHC's initial wind radii for tropical cyclones over the Atlantic and Eastern North Pacific Oceans into the tropical cyclone track and intensity forecasts map service
- Addition of three new data layers for NWS Snow Squall Warning, Dust Storm Warning, and Dust Storm Advisory into the short-duration hazards map service
- Discontinuation of legacy time-offset or forecast projection based map services for NOS 3-D operational oceanographic forecast systems and NWS/NCEP Global Real-Time Ocean Forecast System
- Addition of Canada Marine Zones as a new layer in the
forecast_meteoceanhydro_pts_zones_geolinks map service depicting Canada's marine zone boundaries along with hyperlinks to the corresponding marine text forecast webpages
-Modification of the mapoverlays_admin_fedgov map service to include the latest National Airspace System (NAS) Air Route Traffic Control Center (ARTCC) High and Low boundaries as separate layers
-Discontinuation and removal of the Wind Profilers geo-referenced hyperlinks layer from the obs_meteoceanhydro_remote_pts_areas_geolinks map service
-Update geo-referenced hyperlinks to observations and forecasts to correct URLs or remove dead links
The names of the new time-enabled map services for GoMOFS and Vv Marine Pathogen forecast guidance are the following:
guidance_model_coastalocean_gomofs_time
guidance_model_coastalocean_pathogen_time

Information about these two new services will be available when the new version is implemented in late September at the following URLs:
https://nowcoast.noaa.gov/arcgis/rest/services/nowcoast/guidance_model_coastalocean_gomofs_time/MapServer
https://nowcoast.noaa.gov/arcgis/rest/services/nowcoast/guidance_model_coastalocean_pathogen_time/MapServer

The following actions need to be taken by users of the legacy time-offsets map services of oceanographic forecast model guidance:
Name of Map Services:
guidance_model_coastalocean_cbofs_offsets
guidance_model_coastalocean_creofs_offsets
guidance_model_coastalocean_dbofs_offsets
guidance_model_coastalocean_ngofs_offsets
guidance_model_coastalocean_nyofs_offsets
guidance_model_coastalocean_sfofs_offsets
guidance_model_coastalocean_sjrofs_offsets
guidance_model_coastalocean_tbofs_offsets
guidance_model_coastalocean_leofs_offsets
guidance_model_coastalocean_lhofs_offsets
guidance_model_coastalocean_lmofs_offsets
guidance_model_coastalocean_lsofs_offsets
guidance_model_coastalocean_grtofs_offsets

Summary of Change: 14 legacy time-offsets (projection hour) map services providing maps of forecast guidance from NOS' 3-D oceanographic forecast modeling systems and also NWS/NCEP Global Real-Time Ocean Forecast System (GRTOFS) will be decommissioned.

These map services, designed to mimic the previous version of nowCOAST's legacy map service configuration, were created when nowCOAST became operational on the NOAA Integrated Dissemination Program (IDP) infrastructure in 2015. The maps
provided time for users to transition to the corresponding time-enabled map service for each of these NOS and NWS forecast systems. Users can still use OGC Web Map Service (WMS) or GeoServices REpresentational State Transfer (REST) protocols to obtain the same maps from the time-enabled map services; instead of specifying a target layer for each forecast to be viewed, users must instead provide both a target layer identifier and a desired time value in their requests.

Users need to modify their applications before late September to use corresponding time-enabled map services (e.g. guidance_model_coastalcean_dobfs_time). Detailed information on how to do this can be found at https://nowcoast.noaa.gov/help/#!section=time-enabled-map-services

The following actions need to be taken by users of the short-duration hazards warning map service:

Name of Map Service:
wwa_meteoceanhydro_shortduration_hazards_warnings_time

Summary of Change: Three new warning layers will be added to this service: Snow Squall Warning, Dust Storm Warning, and Dust Advisory. Users of the REST service endpoint can continue using their existing configurations but will need to update their clients if they wish to access the three new layers. Users of the WMS endpoint will be required to update the configuration of any existing clients after the change is made, as the WMS layer identifiers of all existing layers will be changing.

After the change, the layer configuration will be as follows:

Special Marine Warning: REST id=0, WMS id=7
Tornado Warning: REST id=1, WMS id=6
Extreme Wind Warning (Associated with Major Hurricane):
    REST id=2, WMS id=5
Severe Thunderstorm Warning: REST id=3, WMS id=4
Flash Flood Warning: REST id=4, WMS id=3
Snow Squall Warning: REST id=5, WMS id=2
Dust Storm Warning: REST id=6, WMS id=1
Dust Advisory: REST id=7, WMS id=0

The following actions need to be taken by users of the tropical cyclone track and forecast intensity track forecasts map service:

Name of Map Service:
wwa_meteocean_tropicalcyclones_trackintensityfcsts_time

Summary of Change: One new layer will be added to this map service: Tropical Cyclone Current Wind Extent. Due to this change, several of the pre-existing layer identifiers for both the REST and WMS endpoints will be changing. Thus, users of both
the REST and WMS service endpoints will need to update their client application configurations to use the updated layer identifiers to avoid experiencing unexpected results. After the change, the layer configuration will be as follows:

Atlantic, Central Pacific and Eastern Pacific Ocean Regions (group layer): REST id=0, not present in WMS

Tropical Cyclone Track and Intensity Forecasts (group layer): REST id=1, not present in WMS

Tropical Cyclone Watches and Warnings for Coast: REST id=2, WMS id=10

Tropical Cyclone Center Position Forecasts: REST id=3, WMS id=9

Tropical Cyclone Track Line Forecasts: REST id=4, WMS id=8

Tropical Cyclone Current Wind Extent: REST id=5, WMS id=7

Tropical Cyclone Cone of Uncertainty for Track Forecasts: REST id=6, WMS id=6

Tropical Cyclone Preliminary Best Track Analyses (group layer): REST id=7, not present in WMS

Tropical Cyclone Observed Center Positions: REST id=8, WMS id=4

Tropical Cyclone Observed Track Line: REST id=9, WMS id=3

Tropical Cyclone Observed Surface Wind Swath: REST id=10, WMS id=2

The following actions need to be taken by users of the Zone & Point Forecast Geo-Referenced Hyperlinks map service:

Name of Map Service: forecast_meteoceanhydro_pts_zones_geolinks

Summary of Change: One new layer will be added to this service within the Marine Weather Forecasts group, titled "Canada Marine Zone Forecasts." Because of this change, several layer identifiers will be changing, so users of either the REST or WMS endpoint should review the revised service configuration and make any required changes.

After the change, the layer configuration will be as follows:

Air Quality Forecasts (group layer): REST id=0, not present in WMS

Air Quality Index Forecasts: REST id=1, WMS id=17

Ecological Forecasts (group layer): REST id=2, not present in WMS

Harmful Algae Bloom Forecasts: REST id=3, WMS id=15

River Forecasts (group layer): REST id=4, not present in WMS

River Stage & Discharge Forecasts (AHPS): REST id=5, WMS id=13

Aviation Weather Forecasts (group layer): REST id=6, not present in WMS

Terminal Aerodrome Weather Forecasts (TAF): REST id=7, WMS id=11

Fire Weather Forecasts (group layer): REST id=8, not present in WMS

Fire Weather Zone Forecasts: REST id=9, WMS id=9

Marine Weather Forecasts (group layer): REST id=10, not present in WMS

Surf Zone Forecasts: REST id=11, WMS id=7

Coastal Marine Zone Forecasts: REST id=12, WMS id=6

Offshore Marine Zone Forecasts: REST id=13, WMS id=5

High Seas Marine Zone Forecasts: REST id=14, WMS id=4

Canada Marine Zone Forecasts: REST id=15, WMS id=3
Weather Forecasts (group layer): REST id=16, not present in WMS
Public Weather Zone Forecasts: REST id=17, WMS id=1

The following actions need to be taken by users of the Map

Overlays of Federal Agencies Administrative Regions map service:

Name of Map Service: mapoverlays_admin_fedgov
Summary of Change: The existing Air Route Traffic Control Center (ARTCC) boundaries layer has been split into two separate layers: one for ARTCC High and another for ARTCC Low and grouped together into a group layer. Because of this change, several layer identifiers will be changing, so users of either the REST or WMS endpoint should review the revised service configuration and make any required changes.

After the change, the layer configuration will be as follows:
NWS Tropical Cyclone Breakpoints: REST id=0, WMS id=12
NAS Air Route Traffic Control Center Boundaries (group layer): REST id=1, not present in WMS
NAS Air Route Traffic Control Center High Boundaries:
  REST id=2, WMS id=11
NAS Air Route Traffic Control Center Low Boundaries: REST id=3, WMS id=10
NWS Weather Forecast Office County Warning Area Boundaries:
  REST id=4, WMS id=8
NWS Administrative Region Boundaries: REST id=5, WMS id=7
NWS River Forecast Center Service Area Boundaries: REST id=6, WMS id=6
USCG Administrative Region Boundaries (group layer): REST id=7, not present in WMS
USCG Sector Boundaries: REST id=8, WMS id=5
USCG District Boundaries: REST id=9, WMS id=4
USACE Administrative Region Boundaries (group layer): REST id=10, not present in WMS
USACE District Boundaries: REST id=11, WMS id=2
USACE Division Boundaries: REST id=12, WMS id=1

The following actions need to be taken by users of the Geo-Referenced Hyperlinks to Remotely-Sensed Observations map service:

Name of Map Service: obs_meteoceanhydro_remote_pts_areas_geolinks
Summary of Change: The Wind Profiler Observations layer has been discontinued and removed from the service. Because of this change, several layer identifiers will be changing, so users of either the REST or WMS endpoint should review the revised service configuration and make any required changes.

After the change, the layer configuration will be as follows:
Remotely-Sensed Weather Observations (group layer): REST id=0,
not present in WMS
Web Cameras: REST id=1, WMS id=2
Weather Radar Reflectivities: REST id=2, WMS id=1

After the implementation has been completed, please reference each service's REST Service Description page, WMS GetCapabilities document, or the following help pages to verify the new layer configurations:
REST Layer Identifier
lookup:  https://nowcoast.noaa.gov/help/#!section=rest-layer-ids

WMS Layer Identifier
lookup:  https://nowcoast.noaa.gov/help/#!section=wms-layer-ids

If you have technical questions concerning these changes, please contact nowcoast.team@noaa.gov

For all other questions concerning these changes, please contact:

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NWS and NOS Service Change Notices are online at:

https://www.weather.gov/notification/