Report by NOAA/NCEI on maintenance of the GEBCO Gazetteer (NOAA) & interoperability with SCUFN Operational Web Services
SCUFN 37-07.1A

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Introduction

1. The NCEI/DCDB software development team continues to make enhancements to Gazetteer 5 based on feedback from SCUFN members and internal testing

2. 8 enhancements and 9 fixes were made since SCUFN 36

3. Gazetteer v5.0.4 will be deployed to production after SCUFN 37 to prevent disruption during critical SCUFN activities

4. ngdc.noaa.gov/gazetteer/
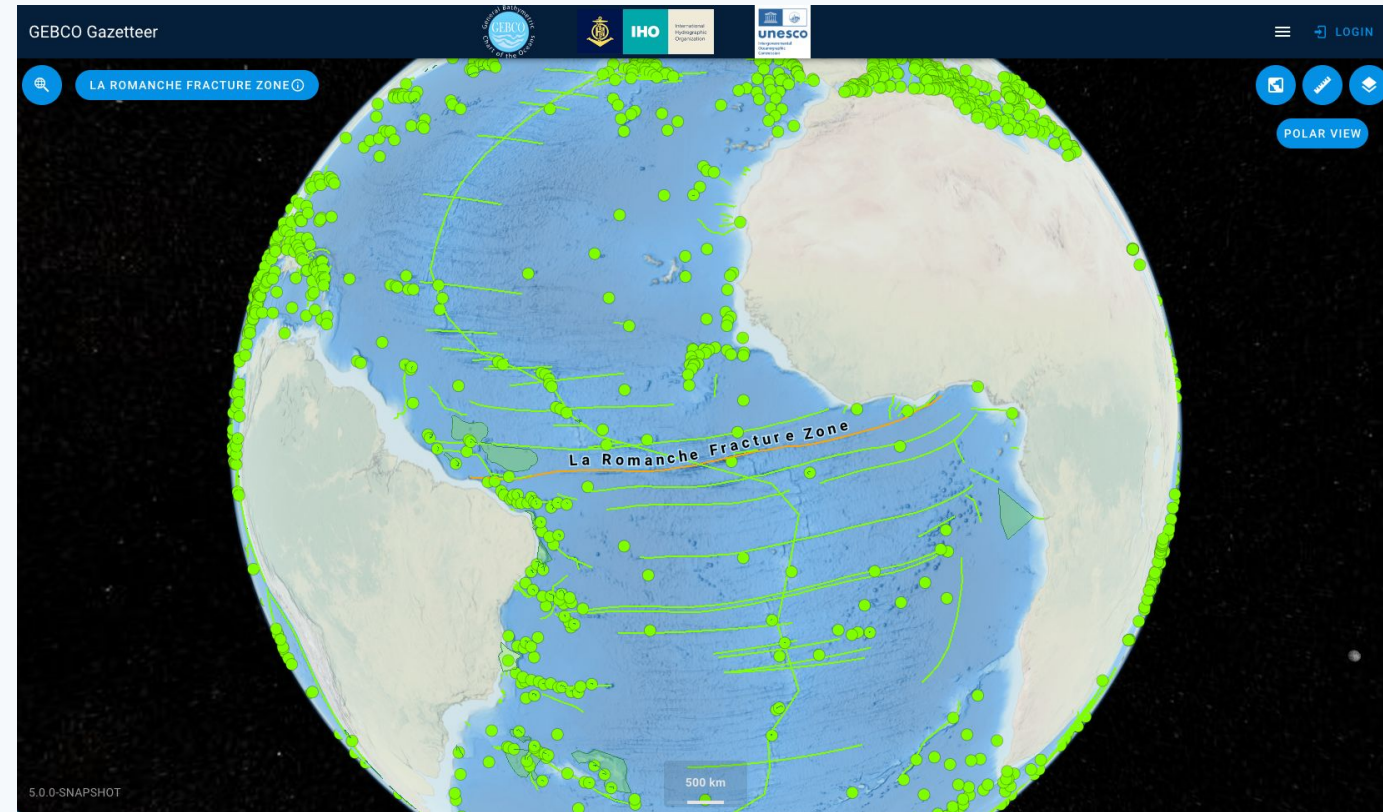
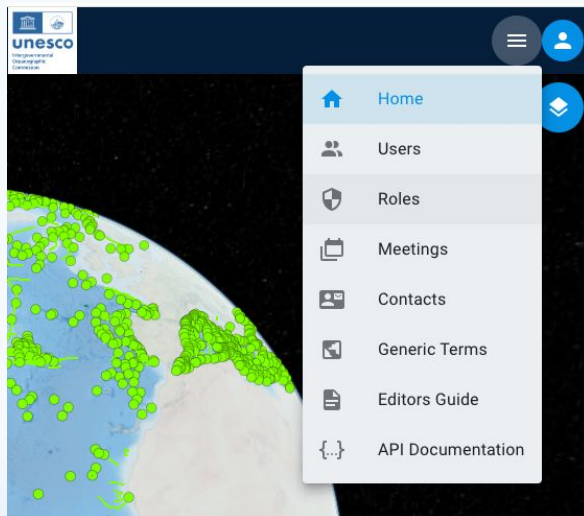# *Enhancement #1:* Limit Feature Search For Public Users

Feature search options are limited to specific term, generic term, and area of interest for unauthenticated users.
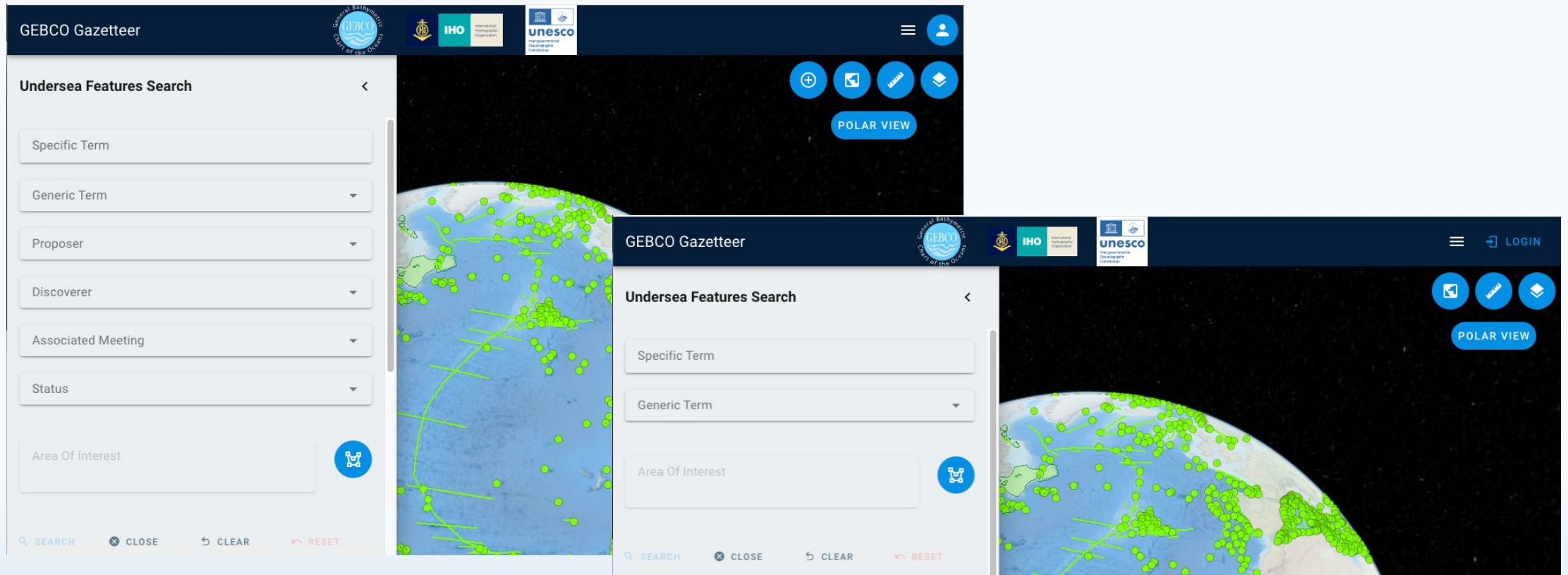
Enhancement #2: User Role Edit Page

Custom roles besides ADMIN and EDITOR can be created.

This is necessary to support KHOA OWS and GEBCO Gazetteer interoperability.

Enhancement #3: Map Loading Spinner

Progress spinners were added to indicate when server resources are being loaded.
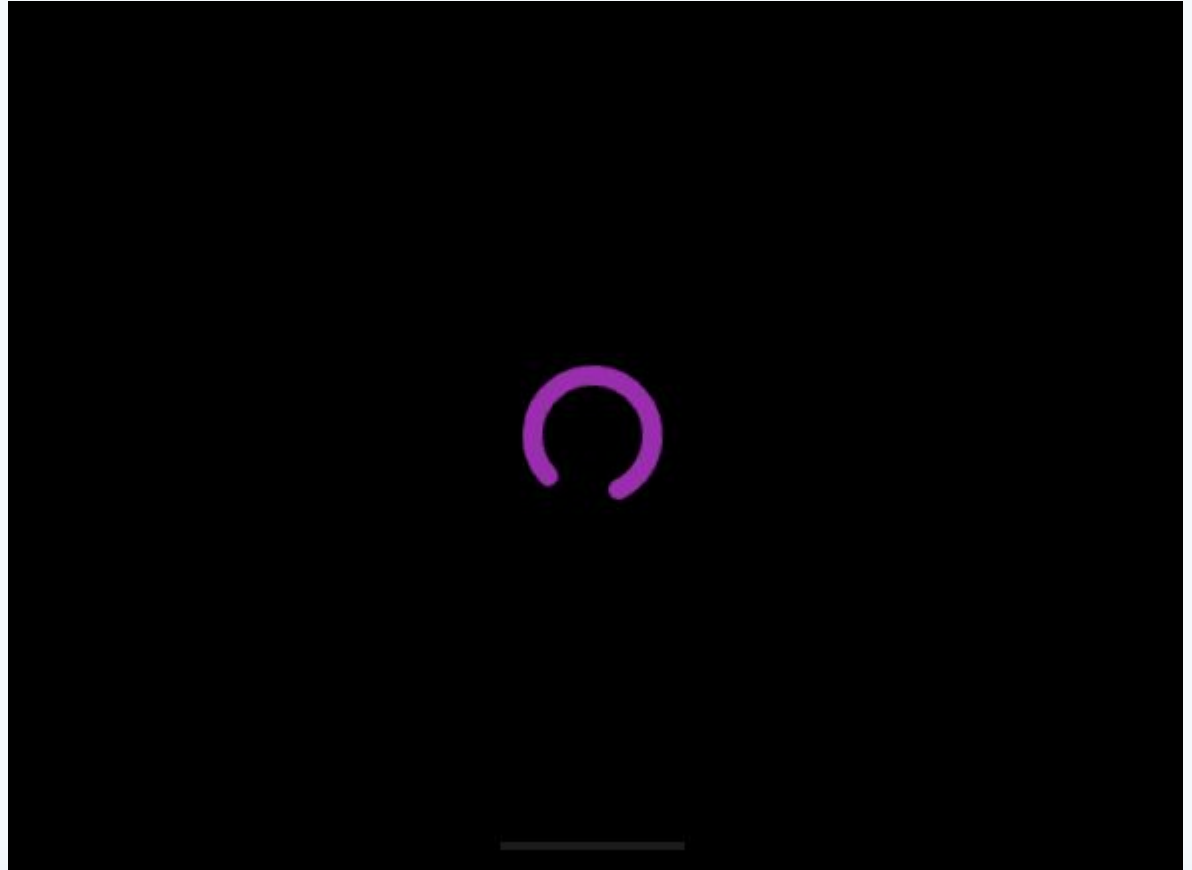
Enhancement #4: Generic Term Links

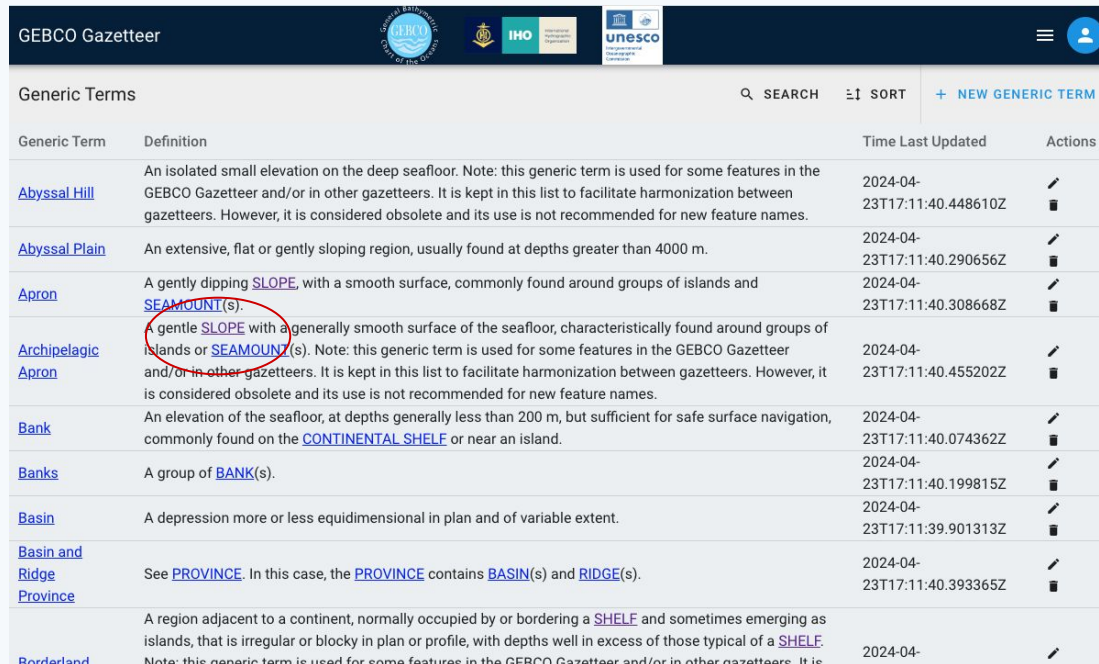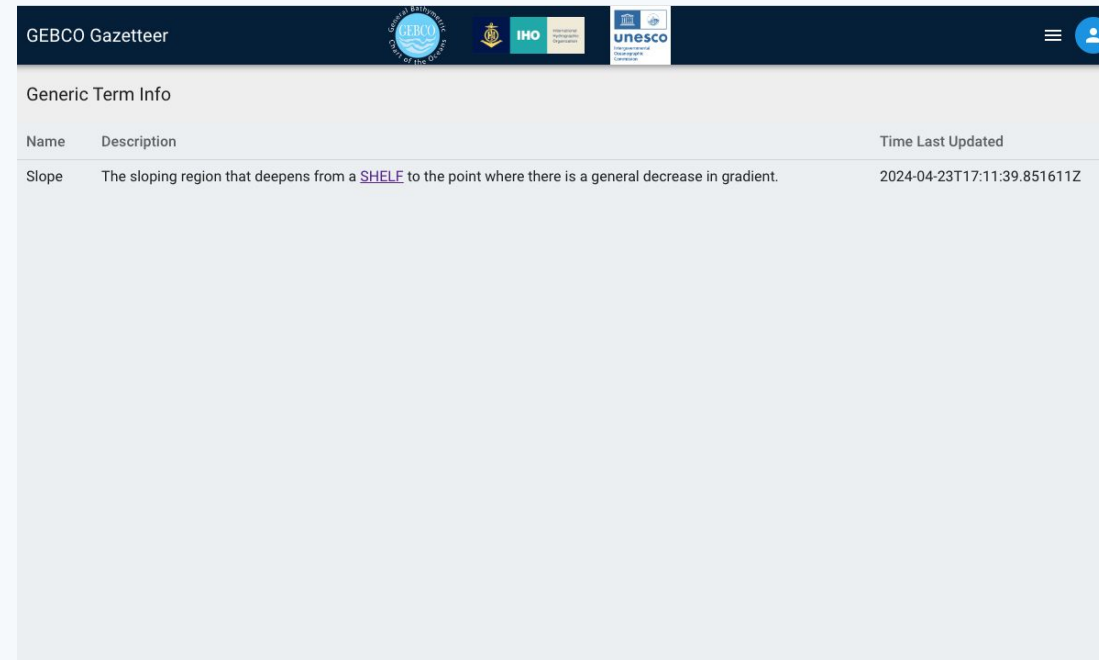Related generic terms listed in the admin page links to a description of that term.

Enhancement #5: Build Version Automatically Added In Build

The build number is now automatically added when the Gazetteer is built, removing a manual step in configuration.

Gazetteer Version: 5.0.4-SNAPSHOT

Enhancement #6: More Natural Feature Point Sizing

Features represented as points now scale up when zooming in, giving a more natural experience.
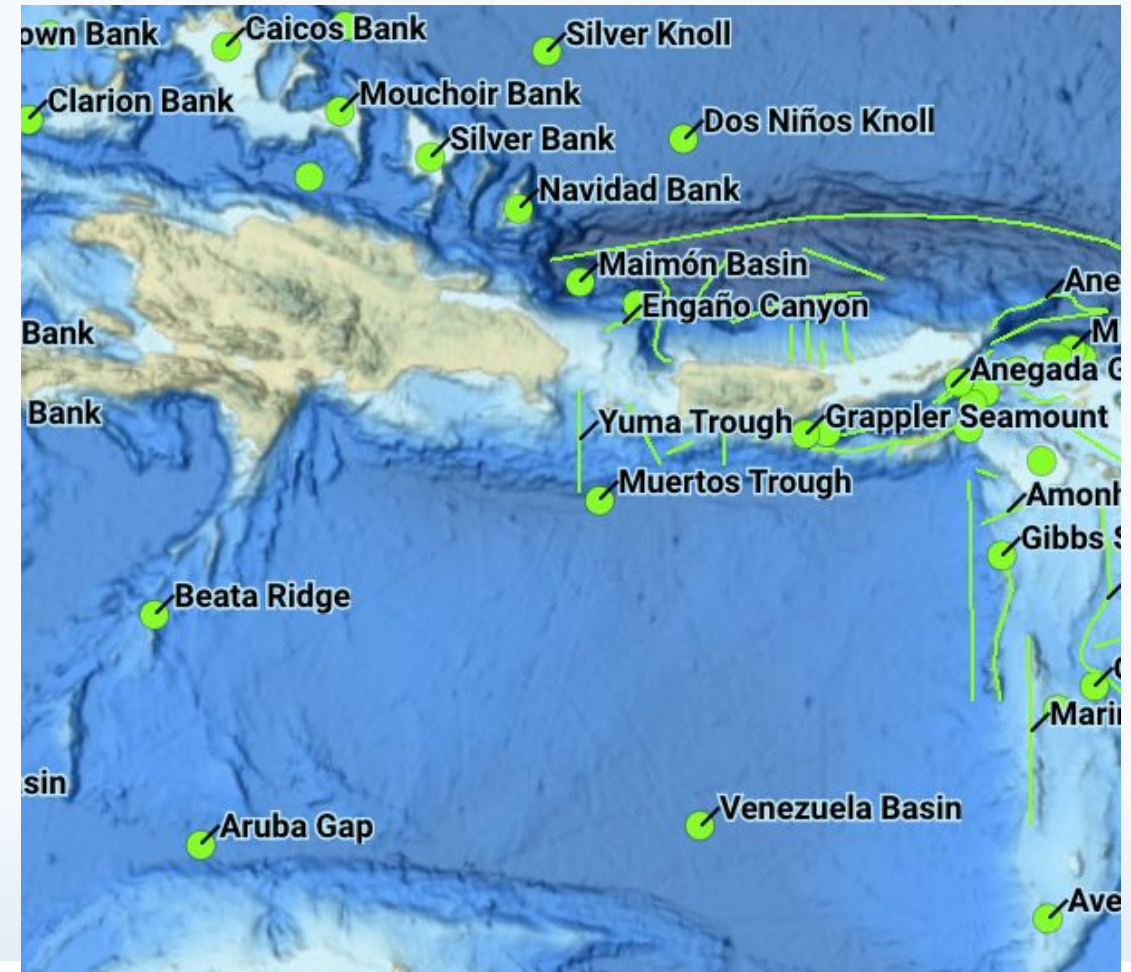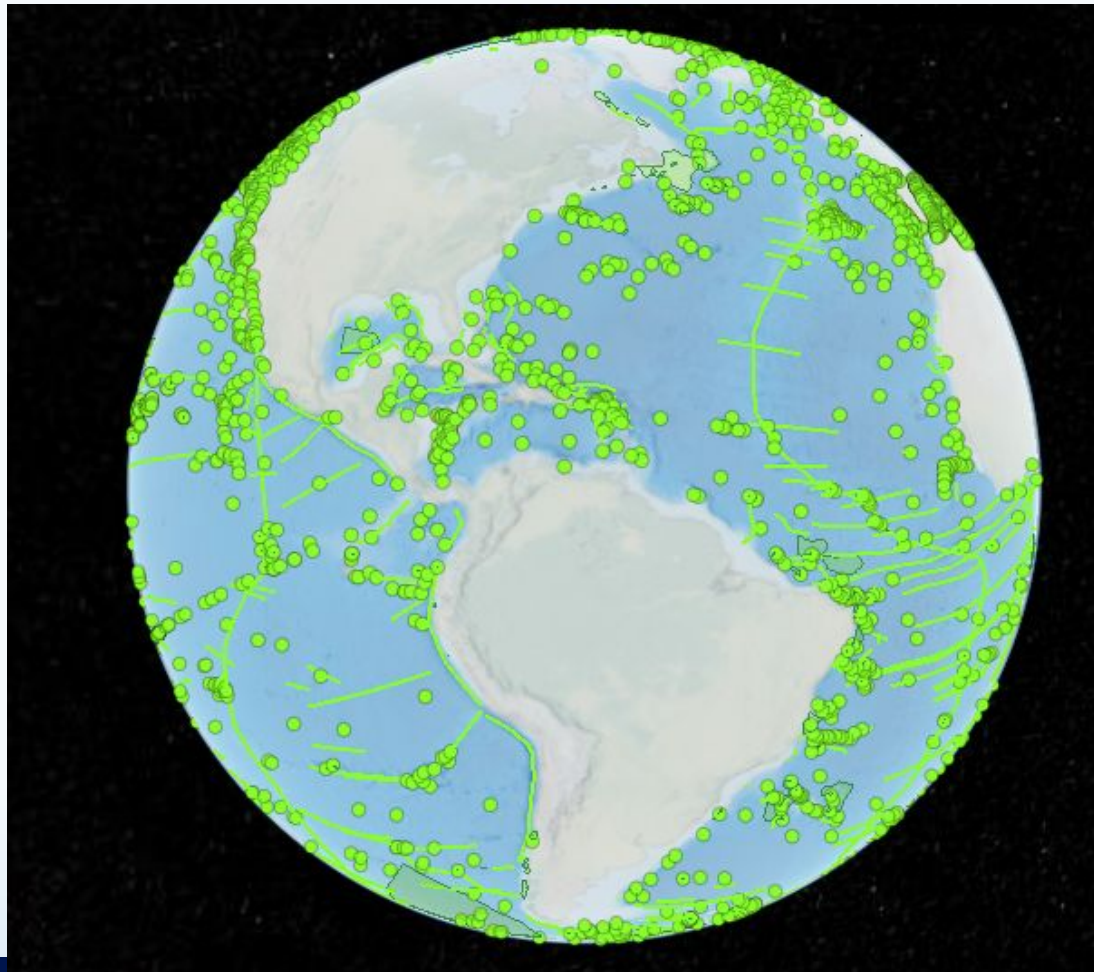
Enhancement #7: API Only Service Users

A new type of user was defined that can only access the API and not the user interface with login.gov. This API Only user will make the KHOA OWS - GEBCO Gazetteer interoperation easier to configure.

Enhancement #8: Disable Flyover View From Map

The globe used in the GEBCO Gazetteer supports a flyover view, which is like flying in a plane across the surface of the globe. This could accidentally be triggered, which could lead to a confusing experience. This behavior was disabled.

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GAZ-554

Fix #1: Fix "Rendering has stopped" error

Occasionally, when navigating the globe, a rendering error would appear and the globe would no longer function.

The use of the Cesium map library was refactored to prevent this error.

Fix #2: Unable To Use Measure Tool Near Top Of Window

The user was unable to place measure tool points near the top of the screen near the control area.
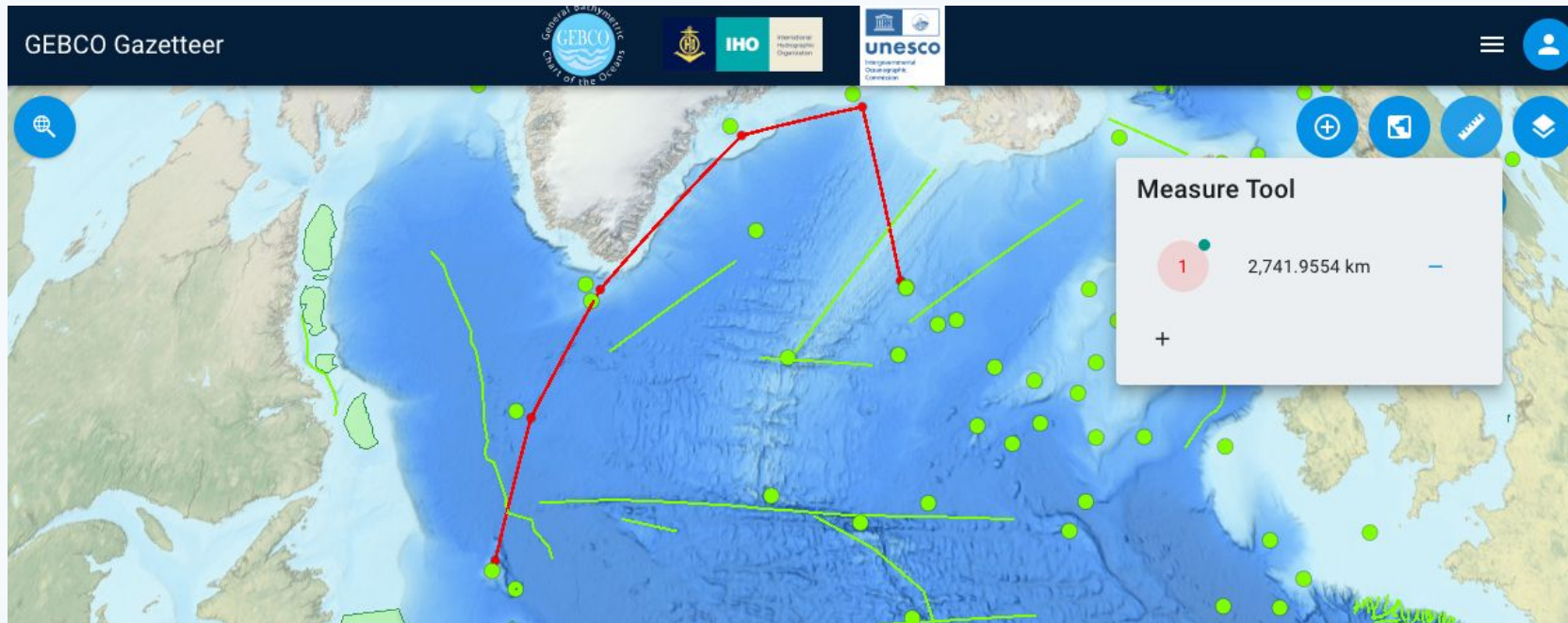
Fix #3: Dropdown Deselection

In the feature workflow, once a dropdown was selected, it could not be deselected.
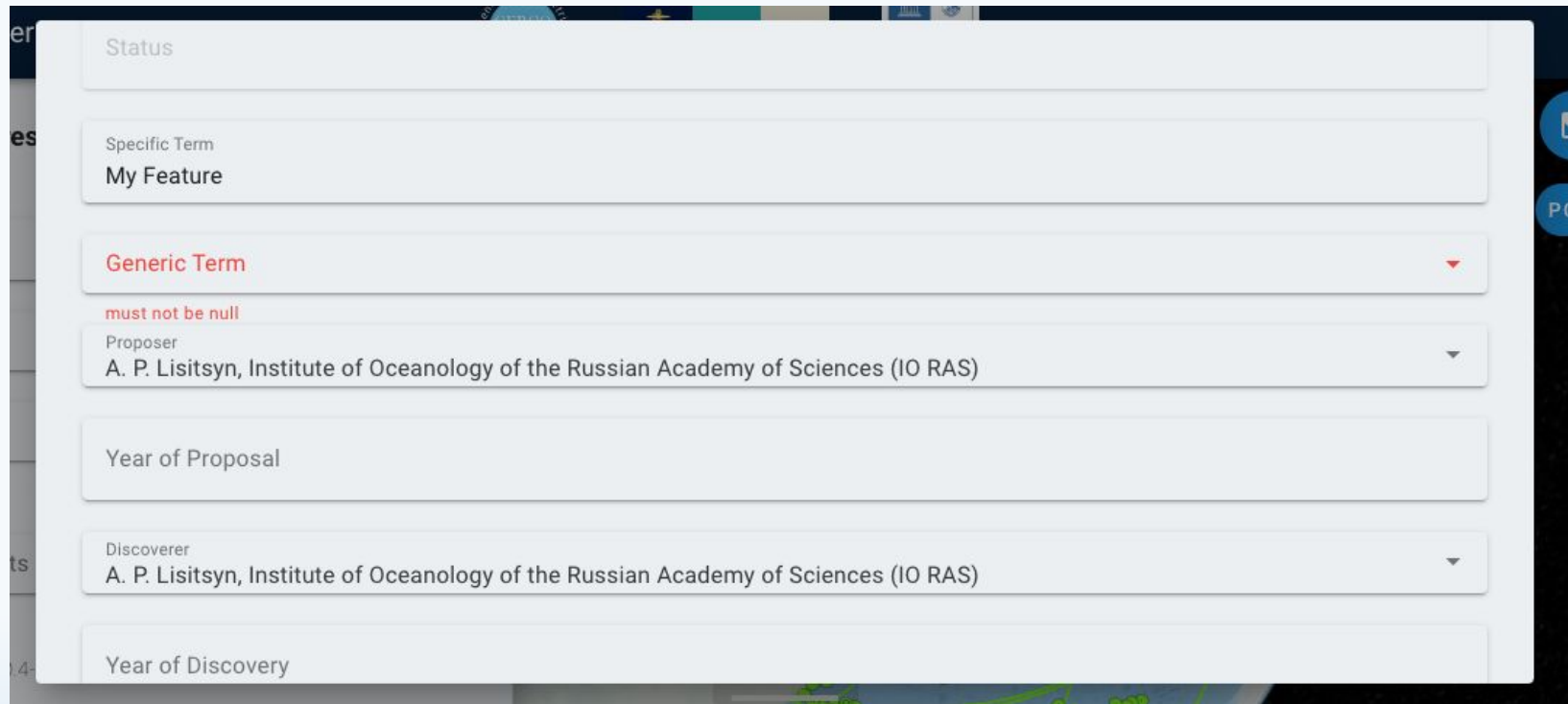
Fix #4: Fix Feature Export

Feature export functionality was restored.
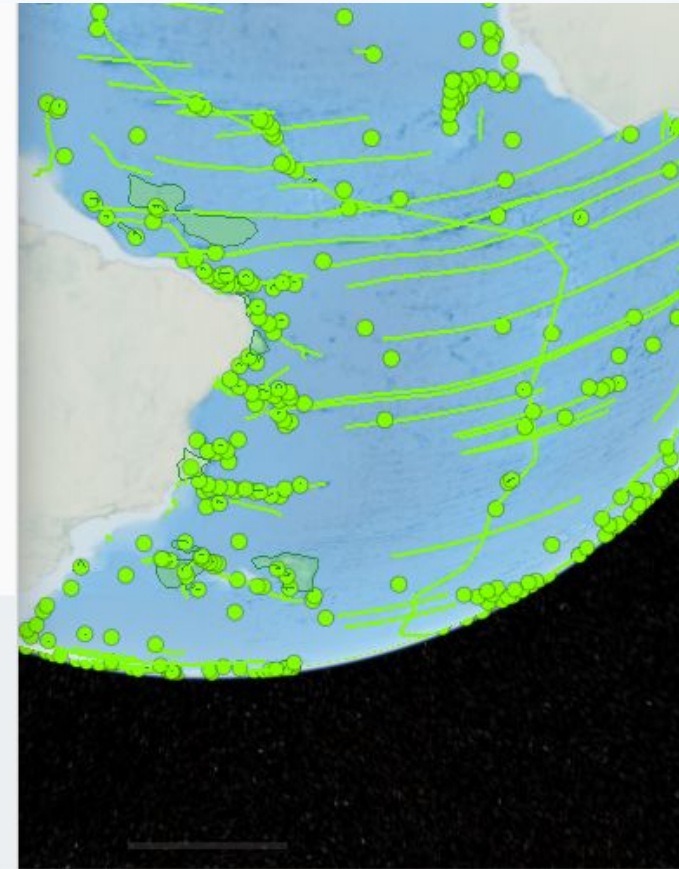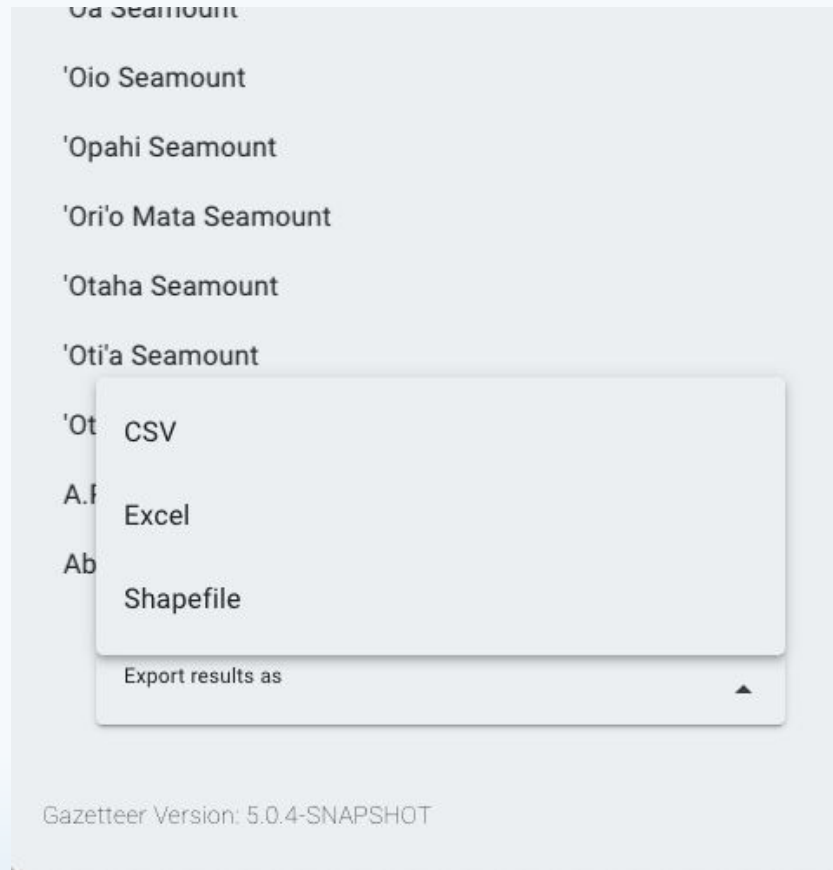
Fix #5: Proposer And Discoverer Cleared On Error

In the feature workflow, the proposer and discoverer were cleared when an error was displayed on the form. This has been fixed.

Fix #6: Change Terminology On Polar View

It was commented that the polar view option, "Disable", sounded permanent.
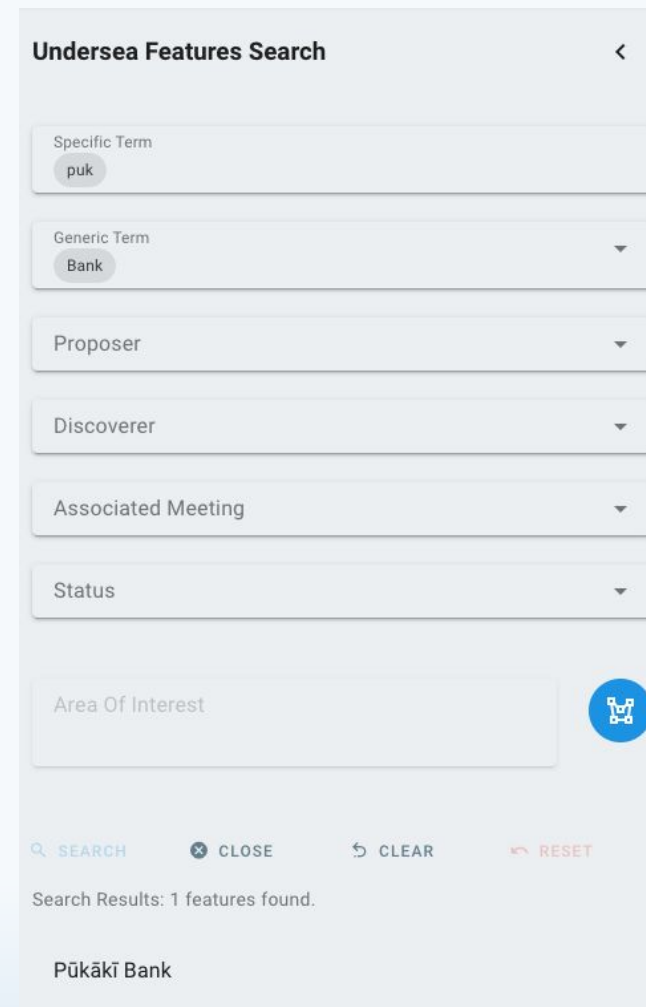
This was replaced with "Standard View".
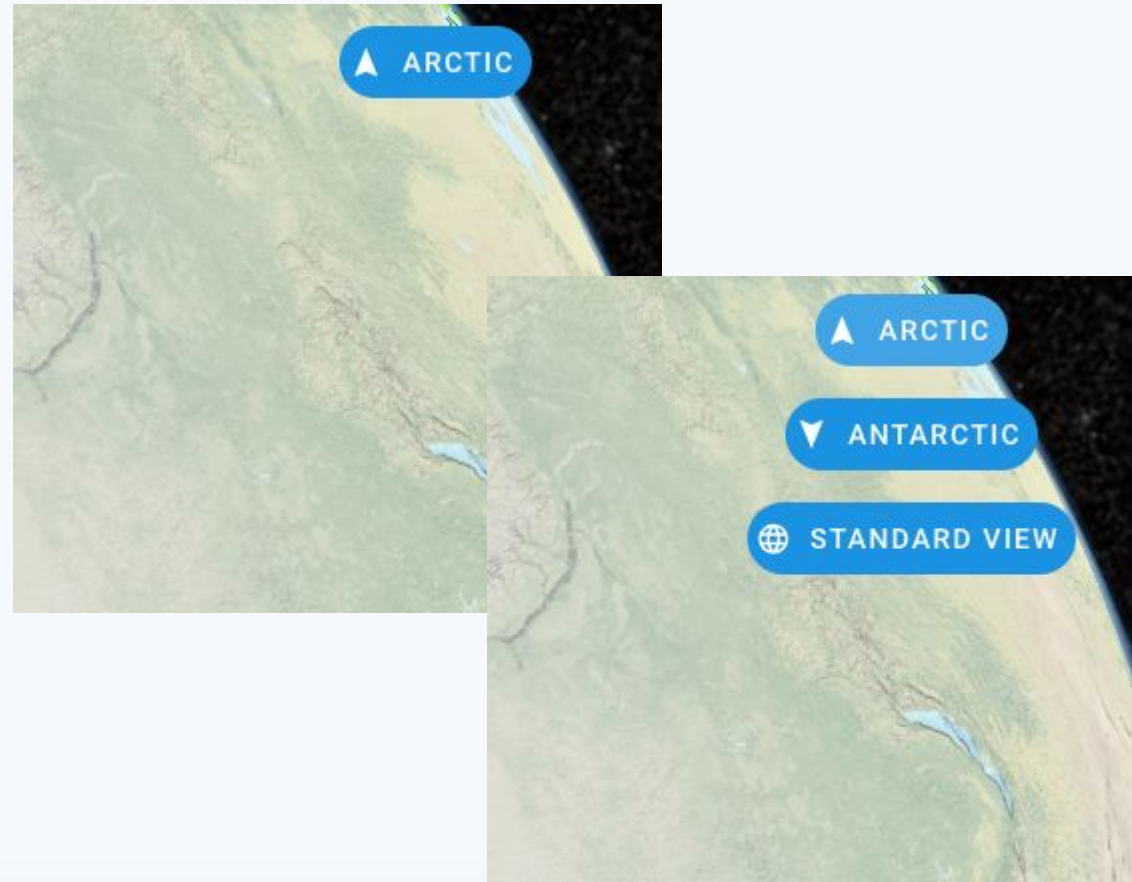
Fix #7 - Search parameters not displayed when reopening search panel

When the search panel was reopened, the previous search parameters were not displayed. This has been fixed.

Fix #8: Link To IHO Was Broken

The previous link was https://iho.int/srv1/index.php. This was changed to https://iho.int/.

Fix #9 - Unable To Toggle Coordinate Units

The coordinate unit setting toggle was not working. This has been fixed
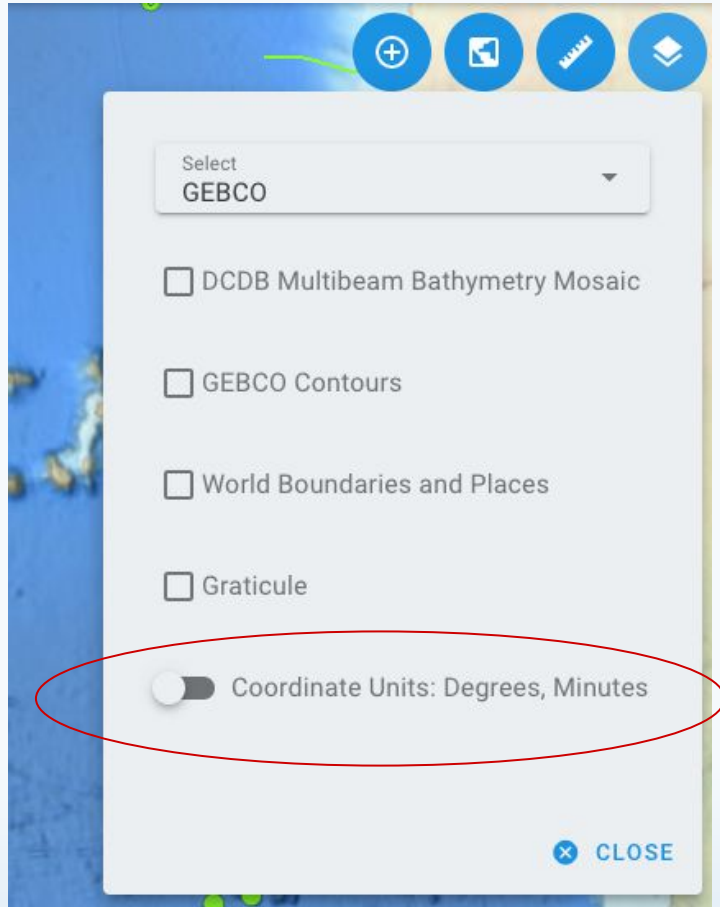
KHOA OWS Interoperation Testing

KHOA has been testing against the demonstration GEBCO Gazetteer instance running at https://ccog.colorado.edu/gazetteer5.

The Gazetteer software development team has been available for questions and server support.

One database failure occurred on the demonstration server and a backup was restored.

Communication and collaboration between the two teams allowed for testing to resume.

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The Future of SCUFN - Enhanced Naming

Future enhancements to the GEBCO Gazetteer can be made to support:

1. Unique alphanumeric identifiers for undersea features (similar to star names)

2. Additional names for undersea features (multiple languages, variants)

Ref. SCUFN37-03.5A

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The Future of SCUFN - Enhanced Naming

Changes required to support enhanced naming:

1. Update to relational database schema

2. Update to REST API

3. Update to public and administrator user interface

4. Possible updates to existing features to retroactively add unique identifiers (depending on SCUFN requirements)

5. Coordination with KHOA OWS developers to support interoperation

Estimated LOE: 1 developer month

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Any Other Items of Note

SCUFN Secretary to invite all proposers having ACCEPTED naming proposals to provide associated bathymetric data to the IHO DCDB

- *Ref. SCUFN36/04.0/01, SCUFN36/10.2/01 and also from former SCUFN meetings*

To date, 2 datasets have been submitted:

1. Brazil - SCUFN34
2. Brazil - SCUFN32
3. China - SCUFN32

See: ncei.noaa.gov/iho-data-centre-digital-bathymetry

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Technical Side Meeting - 2024/06/24

Outcome

1. Answered questions related to managing features via the GEBCO Gazetteer REST API
2. Updated KHOA OWS -> GEBCO Gazetteer flow diagram
3. Generated new question about maintaining non-accepted features

Technical Side Meeting - Updated Flow

KHOA SCUFN OWS will update Gazetteer to READY state when ready for review

Full flow chart:
https://lucid.app/lucidchart/c42d1ce4-791c-4e83-b9ae-0925d626095f/view
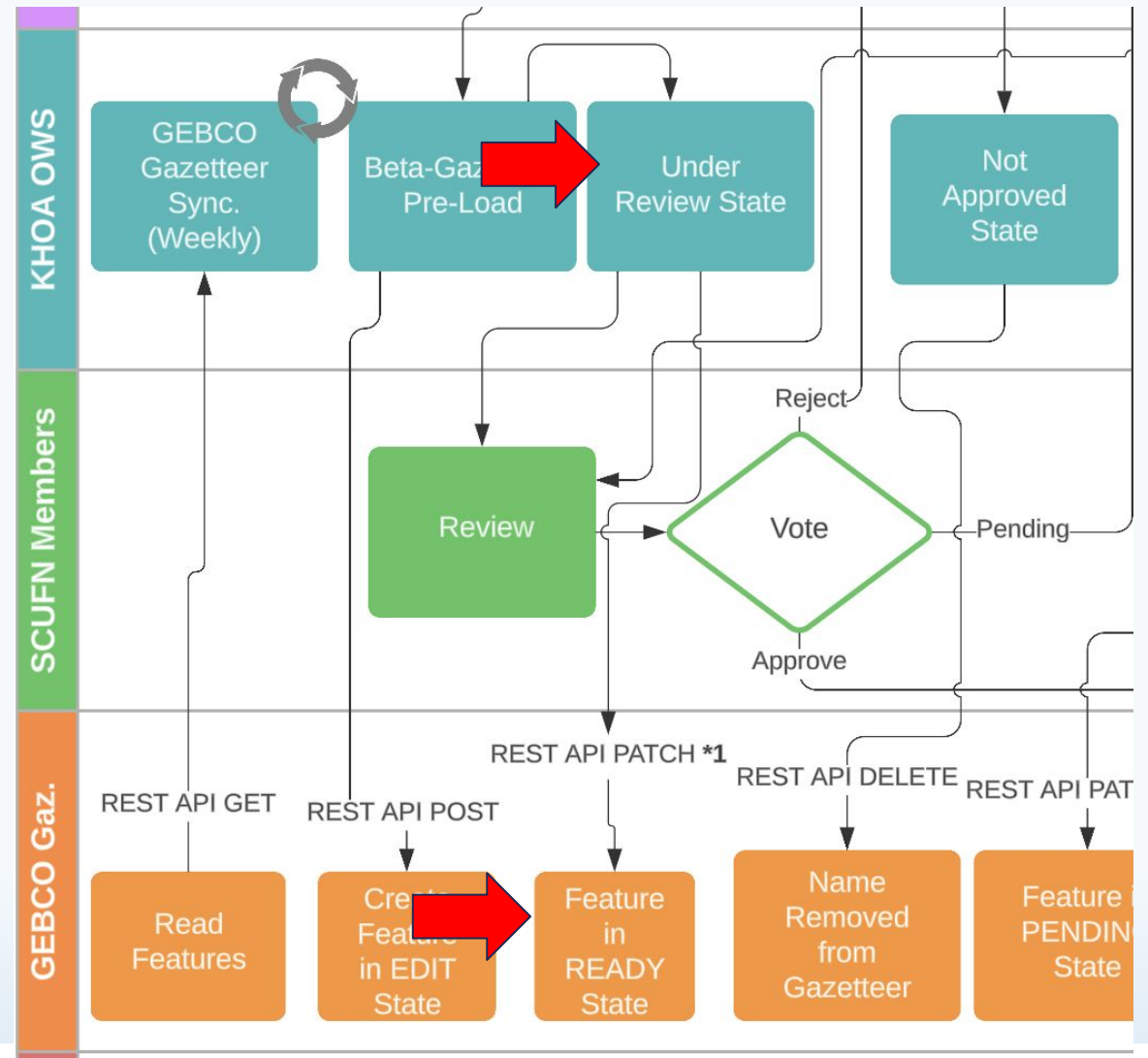
Questions of SCUFN:

Should the GEBCO Gazetteer retain non-accepted features?

If so, should a new state in the GEBCO Gazetteer be defined? NOT_APPROVED?
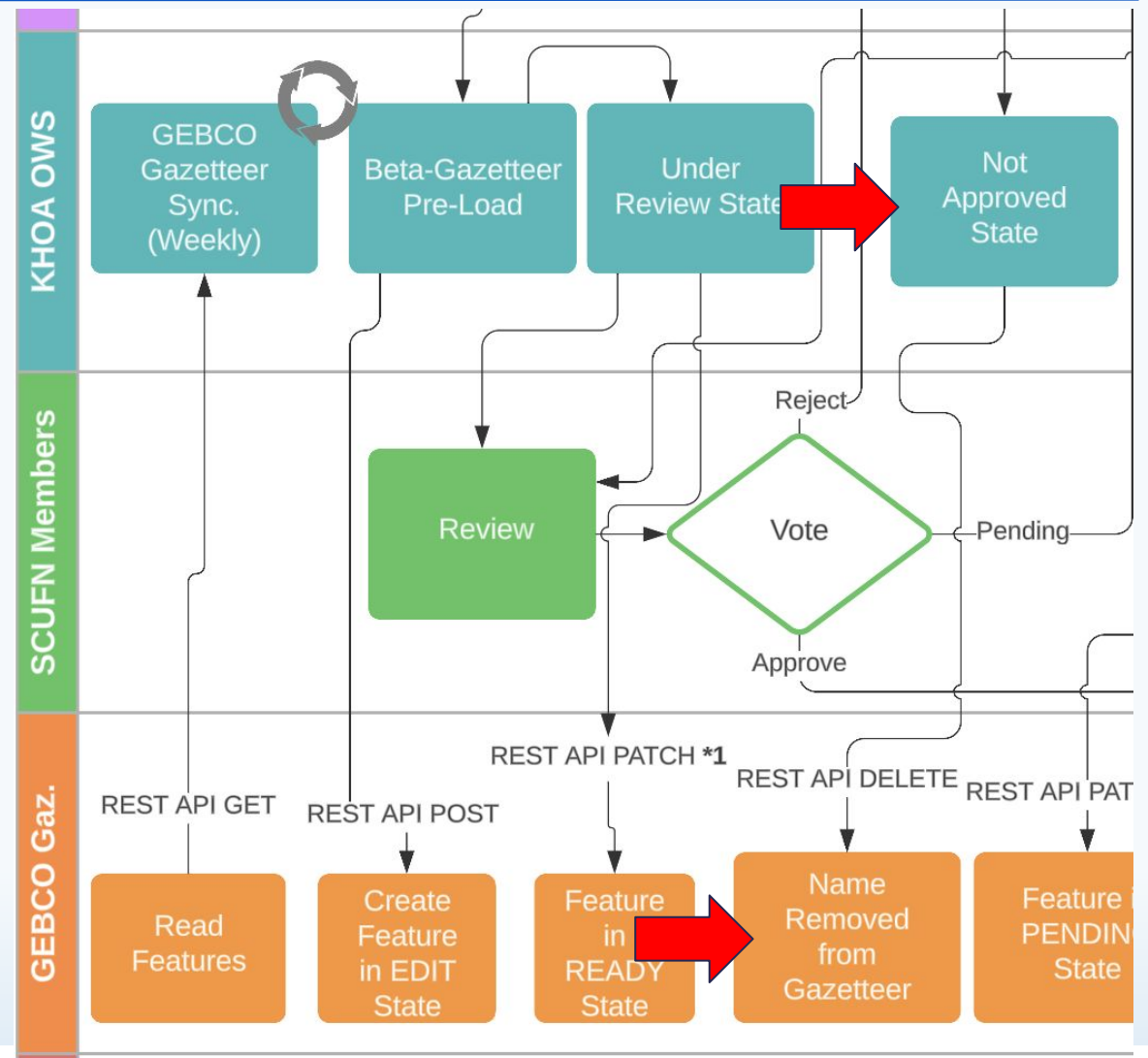
Recommendations

1. SCUFN Members test Gazetteer v5 and notify the IHO DCDB of any issues.

2. SCUFN members provide support and feedback when needed during development of the GEBCO Gazetteer and KHOA OWS interoperation.

3. KHOA OWS developers continue to test with the Gazetteer v5 test environment and let GEBCO Gazetteer developers know of any issues, changes, or questions.

4. Provide detailed requirements for implementation of enhanced feature naming

5. SCUFN Members provide guidance on matter of retaining non-accepted features within the GEBCO Gazetteer

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Justification & Impacts

It should be understood that continued improvements and enhancements of the Gazetteer will remain incremental.

Annual funding will continue to be used to:

a. Perform annual maintenance and upgrades (when necessary)

b. Implement a limited number of requested enhancements

c. Progress the development of the GEBCO Gazetteer and KHOA OWS interoperation

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Actions required of SCUFN

SCUFN is invited to:

    a.   note this paper;

    b.   consider the Recommendations and Impacts listed.

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Please contact Chris Slater with requests and feedback
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