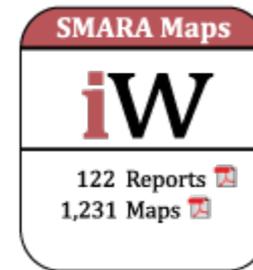
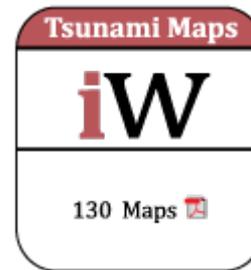
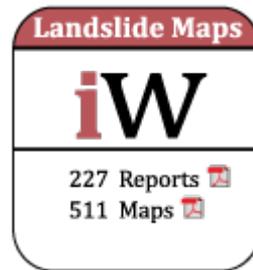


information warehouse

C A L I F O R N I A G E O L O G I C A L S U R V E Y



- Released on March 20th, 2013
- Over 1,100 visits/day (*weekdays only*)
- Access to over 5,700 digital files which represents only a portion (~25%) of CGS's repository.





The evolution of the web has helped revolutionize how CGS delivers products on it

CGS – Background/Purpose

Evolution of CGS on the Web

Information Warehouse

Demo

Application Design/Architecture

Online Geologic Maps

Demo

Application Design/Architecture

What's next? the beyond



Background/Purpose

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What's next? the beyond

- CGS has over 5,500 of its own publications. ~1,000 are sold through the CGS Library and regional offices, the rest are out of print.
- The CGS Library has a collection of over 100,000 records referencing other (USGS, DWR, etc...) publications.
- So, how are we going to provide an interface to search publications?
- First, let's see what we've built on in the past to help us determine where to go from here



Evolution of CGS Publications and Online applications

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Information Warehouse

DEMO

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What's next? the beyond

- Home
- Information Warehouse
- Regulatory Maps
- Landslide Maps
- Tsunami Maps
- SMARA Maps

▼ Welcome to CGS's Information Warehouse.

Start exploring CGS's digital information products by clicking on one of the topic tabs above.

information warehouse

CALIFORNIA GEOLOGICAL SURVEY

The warehouse currently hosts a collection of over 3,100 maps, 1,400 reports and 600 Geographic Information System (GIS) datasets representing a portion of CGS's publications produced over its 150+ year history. Additional publications, both old and new, will be added in the future. Digital copies (in pdf format) are available for free download. For those publications with GIS data, the GIS files are also available. Because many of these maps and reports were produced before the availability of GIS, not all products have GIS files available.

This site allows you to search CGS's collection of digitized maps and reports by geographic region. The products are organized by topic into several categories (Regulatory Maps, Landslide Maps, Tsunami Maps & SMARA Maps). As additional products are added, more categories may be added as well.

Start exploring by clicking on one of the topic tabs above.

RECENT NEWS:

July 1, 2013 - [New SMARA Mineral Land Classification Maps](#). This latest addition to the warehouse adds 122 reports and 1,231 maps to the collection!

June 14, 2013 - Landslide Maps are now available for Open File Reports [76-04](#), [90-06](#), [91-05](#) and [95-07](#). They can be found under Landslide Maps.

March 22, 2013 - CGS Releases Information Warehouse

Please [contact CGS](#) for any questions, comments or suggestions.

- ▶ Regulatory Maps
- ▶ Landslide Maps
- ▶ Tsunami Maps
- ▶ SMARA Maps



Online Geologic Maps

DEMO

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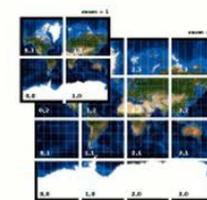
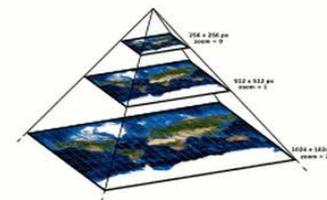
- ▶ Regulatory Maps
- ▶ Landslide Maps
- ▶ Tsunami Maps
- ▶ SMARA Maps



Online Geologic Maps

DEMO

Google Maps Tiling Scheme



CGS – Background/Purpose

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Demo

Application Design/Architecture

Online Geologic Maps

Demo

Application Design/Architecture

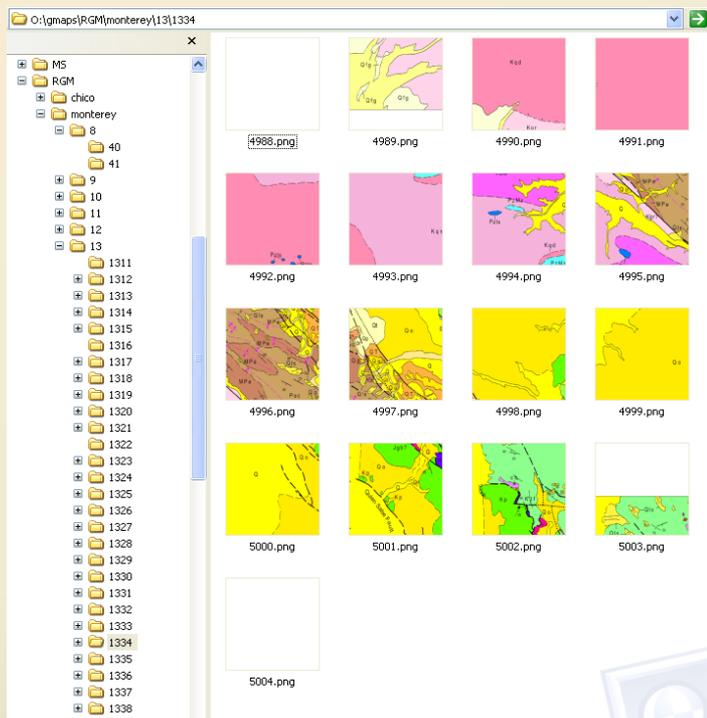
What's next? the beyond

- A pyramid scheme with each zoom level adding 4 times the number of tiles than before.

Map Tiler – Open source software, creates map tiles in OGC standard. (TMS & gdal)

PNG Images optimized using Pngquant batch process (reduction of up to 70%)

- Fault Activity Map - Over 6k images in 140 folders = 32 Mb





CGS – Background/Purpose

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Application Design/Architecture

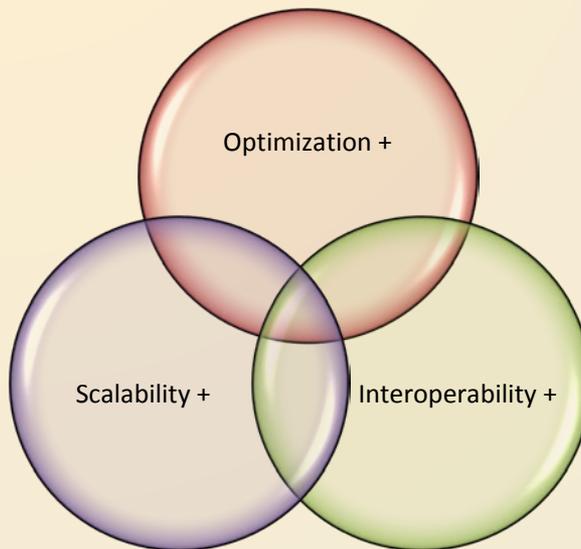
Online Geologic Maps

Demo

Application Design/Architecture

What's next? the Beyond...

What's next?



Optimization +

- One KML file instead of 4
- Enable labeling in KML
- Highlight feature selection in KML

Scalability +

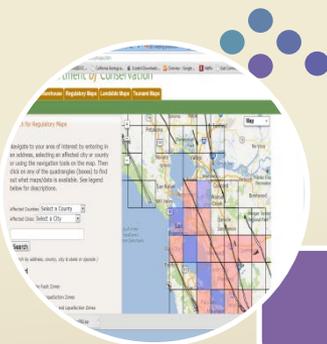
- MBTiles (taking advantage of SQLite)
- Query KML attributes

Interoperability +

- JSON file format – one time access to data but multiple views/queries to the data
- jQuery Mobile – new framework to address mobile users. Cross platform w/HTML5

New Tabs Coming!

- **Mineral Hazard Maps**
- **Geologic Maps (30+ maps into 1)**
- **Mineral Resources**



Information Warehouse



Questions/Comments

CGS – Background/Purpose

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What's next? the beyond

- **Milind Patel**

- EMAIL: mpatel@conservation.ca.gov
- PHONE: 916.445.0109

- **List of CGS's Online Web Applications w/url's**

- CGS's Information Warehouse
 - <http://www.quake.ca.gov/gmaps/WH/index.htm>
- CGS's Online Geologic Maps
 - http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/google_maps.aspx
- CGS Publications Database
 - http://redirect.conservation.ca.gov/CGS/information/publications/database/Publications_index.asp
- California Geology Magazine Database
 - <http://redirect.conservation.ca.gov/CGS/information/calgeology/index.asp>
- CGS Library Catalog
 - http://redirect.conservation.ca.gov/CGS/information/publications/library_catalog.htm