EcoAtlas Update for the California Wetland Monitoring Workgroup

November 6, 2012
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Today’s discussion points

• Status update
  – EcoAtlas release
  – Portal development

• Monitoring Council presentation and Public release

• Related developments

• Priorities
EcoAtlas development and testing status

• 10 outside reviewers
• More than 150 comments received – no show stoppers
• 96 addressed
• Good performance
Landscape Profile Tool Performance benchmarking

- Goal is 5 seconds “web” time per query for dynamic spatial analysis
- Leveraging the power of Postgis vector and raster processing capabilities
- We are employing several optimization techniques including generalization and dicing (indexing)
Arc 10.0
- Multiple steps - preprocessing, CLIP operation, units conversion
- 45 seconds for CLIP operation
EcoAtlas performance
- 9 seconds to dynamically summarize and report CARI wetland (4 secs) and stream (5 secs) statistics
- GIS not required

- Streams: 4,478 miles
  - Riverine: 4,103 miles
  - Tidal Riverine: 375 miles
Compare EcoAtlas results with ArcMap

**EcoAtlas:**
- Streams: 4,478 miles
- Riverine: 4,103 miles
- Tidal Riverine: 375 miles

**ArcMap:**

5 seconds

45 seconds plus

7205928.836411 meters to miles

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<th>Meter</th>
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EcoAtlas development and testing status
Most significant observations and comments

• Internet Explorer 7 – we recommend not supporting it. 8 and 9 have been standard for some time.

• Aquatic resource classification labels

• Project navigation needs to be improved

• Landscape Profile delineation in flat areas Tool warns users about potential error when a pour point is placed in an urban area or flat area (<3%) slope or both
Recommended before public release

- New home page
- PDF for landscape profile
- Project navigation improvements
- Historical ecology aquatic resources layer cleanup
- Iterate CARI v.0 to address limitations of data aggregation process, i.e., add in NWI riverine polygons. Tradeoff between overestimating vs. underestimating actual extent.
California EcoAtlas provides access to the information needed for effective wetland management. Content-rich, interactive maps and tools can be used to create a complete picture of wetlands in the landscape. EcoAtlas integrates stream and wetland maps, restoration information with land use, transportation, and other information important to the state's wetlands.

Projects
Restoration project maps, plans, contact information, and a library of project files.

Habitats
Maps of wetland extent and special habitats of regional interest.

Conditions
Assessment and monitoring data including relevant water quality and California Rapid Assessment Method (CRAM) data.

Statewide

- North Coast
- Bay Area
- Central Coast
- South Coast
- Central Valley
Outstanding Issues of note

• Places where things weren’t intuitive enough
  - Project navigation
  - CARI classification

• CRAM data filtering modifications per 10/24 L2 mtg

• CARI
  - Legends
  - Do we need more explanation of differing data sources
  - CARCS classification vs. existing Wetland Tracker classification
MWQ Wetlands Portal

- 17 pages created
- New interactive element on primary landing page
- New content on CARI
- Interactive maps
  - Extent (based on CARI v.0)
  - Project locations
  - CRAM overall scores
  - CARI data sources
- Information transferred to state staff
- Programming starting on interactive maps (SFEI)

Portal completion gates CWMW and Monitoring Council signoff
Related developments

• **eCRAM**
  - cramwetlands.org dev website reviewed at L2 meeting
  - New modules
  - New database design complete. Data migration 65% complete. Scripts running and ongoing QAQC.
  - Official migration in December when we will shut down the current eCRAM interface, migrate the data to the new database, and release the new eCRAM interface

• **Online 401 pilot**
  - 120 projects entered
  - 10 around the state
  - 10 RB2 backlog
  - Final report content will identify needs and next steps

• **Landscape profile TAT meeting scheduled**

• **Joint Data Management Workgroup & CWMW meeting**
Wetlands Technology Overview
What needs to happen before EcoAtlas goes public

1. CWMW signoff on EcoAtlas
2. Development of Portal
3. CWMW sign off on Portal
4. Monitoring Council sign off on
Next Priorities (2013 and beyond)

• Projects:
  – Project Information Page, Project summaries, Supplementary form
  – Inclusion of non-permitted projects
    • Notices of intent
    • Proposed projects
  – USACE data exchanges
  – Online 401 Pilot next steps
• LP NHD plus and hydrological info
• An additional user group is needed with 401/404 staff and project proponents
• Sustainability