



Fiscal Year 2012 Coral Reef Information System (CoRIS) Accomplishments

Highlights

Content and Technical Improvements –

CoRIS Geoportal was released. A few highlights on our implementation include:

- The entire CoRIS metadata catalog, including both data and library records, was migrated into the CoRIS Geoportal for fast, easy, and more accurate search capabilities.
- Added data preview capabilities through use of the FGDC metadata's browse graphic fields.
- Enabled temporal and spatial search capabilities of the catalog.
- Added the capability to save search results as customized RSS feeds.
- Implemented Federated Search capabilities to connect to and search other NOAA metadata catalogs directly from the CoRIS user interface.

CRCP released a mobile website – version 1 of the mobile site includes the CoRIS Glossary of Terminology and the CoRIS Acronym List. Both applications have been reformatted so they display correctly on a mobile platform.

ISO Web Accessible Folder (WAF) – Established an ISO WAF which contains metadata in ISO 19115-2 format. The ISO 19115-2 metadata is generated from the existing FGDC CSDGM metadata using an XSLT transformation tool. The ISO WAF is updated daily and reflects the current holdings of the CoRIS FGDC CSDGM metadata catalog.

New Metadata and Data – Added 166 metadata records to CoRIS and made 3,616 record updates. At the conclusion of FY12 CoRIS had a total of 4,732 metadata records that provide users access to approximately 46,397 coral data products.

New Publications – Entered 253 publications into the CoRIS virtual library, bringing the total number of publications in CoRIS to 3,381.

Outreach – CoRIS provided outreach material at the NOAA booth for two ESRI Conferences and the U.S. Coral Reef Task Force meeting. We continued work with the NOAA Ocean Acidification Team, providing guidance and review of the metadata requirements they are establishing for the program. We also initiated discussions with NOS to increase metadata coordination at the administrative level and minimize the impacts of having to submit metadata to two systems on the individual data providers.

Coral Program Support – Provided monthly, quarterly, and annual reports to the CRCP office on coral projects that contributed metadata, data, and publications to CoRIS. Staff continued to work with CRCP Line Officers to provide them with updates for their quarterly calls with CRCP Project Managers to obtain status updates on 2003-2012 products that are overdue and due soon.

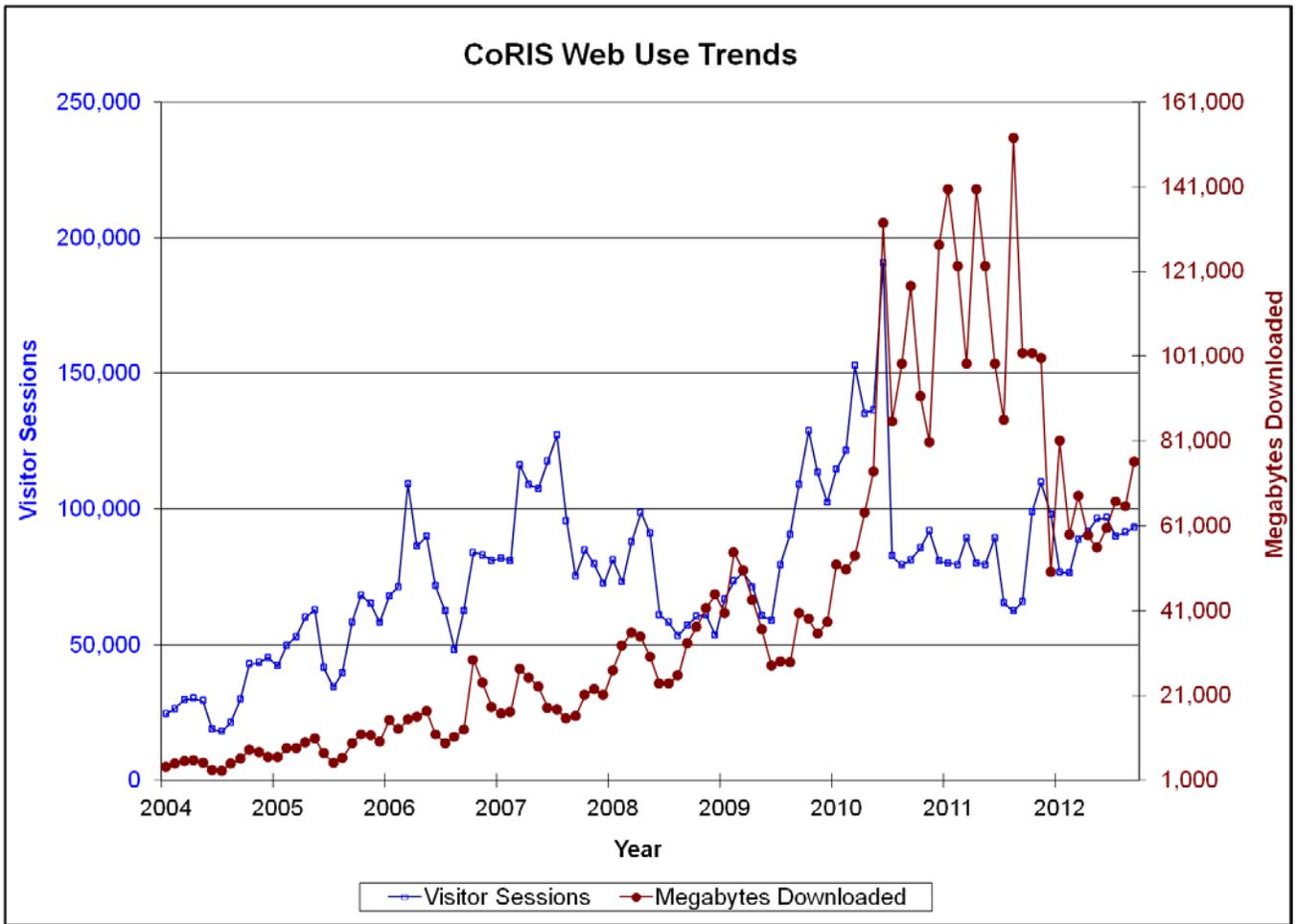
Collaborations – Served as a member of the CRCP Data Management Working Group, CRCP Project Proposal Database Requirements Team, Deep Sea Coral Coordination Call, and other CRCP coordination groups, NESDIS Information Resource Management Team Metadata Meeting, NODC IT Systems Meeting, NODC Web Team Meeting, NODC Archive Management Working Group, FGDC Metadata Working Group, and the NOAA Environmental Data Management Committee

Staff Technical Development – CoRIS staff attended the NOAA Environmental Data Management Conference, ESRI Developers Summit, ESRI Federal User Conference, and the Spatial Ontologies Community of Practice workshop. Staff also participated in the FGDC Metadata Summit and attended advanced ISO 19115 metadata training.

Team Updates - Michele Newlin, the NODC Chief of Staff, replaced Danie Kinkade as the Project Manager for CoRIS. Bhavana Rakesh joined the CoRIS Team as the IT technical lead.

Performance Statistics

Element	September 2011	September 2012	% Change
Number of Metadata Files	4,576	4,732	3.41%
Number of Publication References	3,128	3,381	8.09%
Number of Data & Information Products (including publications)	41,726	46,397	+11.2%
Number of Glossary terms	6,393	6,398	0.08%
Number of Acronyms and Abbreviations	5,246	5,275	0.55%



Top Downloaded Documents

Publication Name	# of FY12 Downloads
Demographic Baseline Report of U.S. Territories and Counties Adjacent to Coral Reef Habitats - U.S. Virgin Islands Chapter	84,536
A Reef Manager's Guide to Coral Bleaching	37,256
CoRIS Glossary of Terminology	35,417
The State of Deep Coral Ecosystems of the United States: 2007	25,172
Proceedings of the International Workshop on Red Coral Science, Management, and Trade: Lessons from the Mediterranean	12,600
State Of Deep Coral Ecosystems in the Gulf of Mexico Region: Texas to the Florida Straits	12,517
NOAA Coral Reef Ecosystem Research Plan for Fiscal Years 2007 to 2011	12,407
CoRIS Acronym List	12,306
Status of Caribbean Coral Reefs after Bleaching and Hurricanes in 2005	11,388
State Of Deep Coral Ecosystems of the United States: Introduction and National Overview	9,984
Coral Reef Habitat Assessment for U.S. Marine Protected Areas: U.S. Territory of American Samoa	9,412
State Of Deep Coral Ecosystems in the Alaska Region: Gulf of Alaska, Bering Sea and the Aleutian Islands	7,850
Report on the Status of Marine Protected Areas in Coral Reef Ecosystems of the United States - Volume 1: Marine Protected Areas Managed by U.S. States, Territories, and Commonwealths	7,493
State Of Deep Coral Ecosystems in the Caribbean Region: Puerto Rico and the U.S. Virgin Islands	7,402
Proceedings of the First International Workshop on Corallium Science, Management, and Trade	7,178

Table: This table represents the top accessed publications from the CoRIS server in FY12. A total of 618,857 publications were downloaded during the fiscal year. Note: These numbers reflect only those documents hosted by CoRIS. The catalog provides linkages to numerous files hosted on external websites.

Top Accessed Metadata Records

Metadata Record	# of FY12 Accesses
2008 IKONOS Image Vieques Puerto Rico - opo_260684_001_ps	3,032
The Coral Reef Temperature Anomaly Database (CoRTAD) Version 1 - Global, 4 km, Sea Surface Temperature and Related Thermal Stress Metrics for 1985-2005 (NODC Accession 0044419)	1,671
High Resolution Aerial Photography of Puerto Rico and the U.S. Virgin Islands, 1965-1999	1,617
Florida Reef Fish Visual Census 1985 Species Site Matrix (NODC Accession 0001394)	1,462

1995 Quantitative Survey of the Corals of American Samoa (NODC Accession 0001972)	1,452
Florida Reef Fish Visual Census 1999 - Present	1,402
National Status and Trends, Benthic Surveillance Project DNA-Xenobiotic Adducts Data, 1991, National Centers for Coastal Ocean Science	1,399
Bahia Las Minas, Panama Oil Spill Assessment 1986-1991, (NODC Accession 9400033)	1,359
Caribbean Coral Reef, Seagrass and Mangrove Sites (CARICOMP), (NODC Accession 0000501)	1,272
Reef community structure, Sand Island, Oahu HI, (NODC Accession 0000177)	1,260
Endangered Species and Wildlife Resources Inventory Kwajalein Atoll, U.S. Army, Republic of the Marshall Islands 1966 (NODC Accession 0000251)	1,245
US Virgin Islands Abandoned Vessel Inventory	1,228
GIS Map of Mosaiced LandSat 7 ETM+ Satellite Imagery of the Marshall Islands (NODC Accession 0067475)	1,175
1998 Inventory of Endangered Species and Wildlife Resources at the US Army Kwajalein Atoll, Republic of the Marshall Islands (NODC Accession 0000631)	1,168
ESI-VI12 Beef Island, U.K. Virgin Islands 2000 (Environmental Sensitivity Index Map)	1,147

Table: The above table represents the top fifteen metadata records accessed over the previous year. During FY12 a total of 2,866,979 records were accessed from the website.

Regional Portal Usage Summary

Regional Portal	FY 10 – Q4	FY11 – Q1	FY11 – Q2	FY11 – Q3	FY11 – Q4	FY12 – Q1	FY12 – Q2	FY12 – Q3	FY12 – Q4	Total
American Samoa	606	583	751	594	713	598	573	918	718	6,054
CNMI	1,263	1138	823	679	723	719	820	1,037	964	8,166
Florida	1,100	1,174	1,229	1,067	1,360	1,640	1,843	2,779	2,436	14,628
Flower Garden Banks	775	718	843	746	723	719	682	2,201	3,364	10,771
Guam	714	670	935	815	1099	1,081	1,174	1,531	1,100	9,119
Hawaii	805	741	875	742	973	1,199	1,017	1,206	1,325	8,883
Homepage	1,284	1,124	1,053	994	1,123	921	857	4,683	8,424	20,463
Marshall Islands	869	1,091	984	836	928	1,125	1,147	1,374	1,472	9,826
Micronesia	547	476	669	663	635	660	601	835	693	5,779
Navassa	570	606	652	555	596	555	576	883	709	5,702
NWHI	461	418	569	444	585	583	539	874	732	5,205
Palau	567	503	568	552	621	534	520	801	664	5,330
PRIAs	624	647	691	611	663	609	608	907	769	6,129
Puerto Rico	1,695	1,251	1,255	1,322	2566	1217	1,193	1,435	1,697	13,631
Virgin Islands	620	574	617	591	769	687	724	960	809	6,351
Total	12,500	11,714	12,514	11,211	14,077	12,847	12,874	22,424	25,876	136,037

Table: The table demonstrates the number of times Regional Portal pages were accessed by visitors to the CoRIS Web site each quarter since the fourth quarter in FY 2010.

Accomplishment Details

New Data and Metadata

Number of metadata records within CoRIS by Line Office

Office/Group	Records Added in FY12	Total Records in CoRIS
NESDIS	25	263
NMFS	87	3,204
NOS	34	1,054
OAR	20	200
Miscellaneous	0	11
Total	166	4,732

Metadata records added to the CoRIS Web site (Fourth Quarter)

Source	Description	Count
NMFS	2012 CRED Towed-Diver Benthic Characterization Surveys at American Samoa and the Pacific Remote Island Areas	11
NMFS	2012 CRED Towed-Diver Fish Biomass Surveys at American Samoa and the Pacific Remote Island Areas	11
NMFS	2012 CRED Rapid Ecological Assessment Reef Fish Surveys at American Samoa and the Pacific Remote Island Areas	11
NMFS	2012 CRED Rapid Ecological Assessment Belt Surveys of Coral Population and Disease Assessment at American Samoa	11
NMFS	2012 CRED Rapid Ecological Assessment Line Point Intercept Survey of Benthic Parameter Assessments at American Samoa and the Pacific Remote Island Areas	11
NMFS	South Florida Sportfishing Geodatabase Charter and Private Vessels from 1991 to 2003	1
NMFS	Predicted Habitat Suitability for Leptoseris in the Au'au Channel Region	1
NMFS	Predicted Habitat Suitability for All Mesophotic Corals in the Au'au Channel Region	1
NMFS	Predicted Habitat Suitability for Montipora in the Au'au Channel Region	1
NMFS	Predicted Habitat Suitability for Porites in the Au'au Channel Region	1
NESDIS	Coastal Ortho-imagery (NODC Accession 0092435)	7
Total Additions		66

Table: Sample of the total metadata record additions (166) and modifications (3,616) that were made to the CoRIS metadata library in FY 2012.

Data provided by CoRIS to a NOAA National Data Center for archiving

Office	Name
OAR	2011 Atlantic Ocean ICON Station Data - Meteorological and Oceanographic Observations
OAR	SEAKEYS -Molasses Reef 2011 Meteorological and Oceanographic Observations
OAR	ICON - Lao Lao Bay, Saipan 2011 Meteorological and Oceanographic Observations
OAR	Temperature, salinity, chlorophyll, and depth data collected aboard the RV F.G WALTON SMITH in the Florida Keys National Marine Sanctuary, Gulf of Mexico, and North Atlantic Ocean from 10/12/2010 to 08/07/2011 (NODC Accession 0092099)
OAR	Ocean Current Velocity Moored Time-Series Records collected from moored Acoustic Doppler Current Profilers near Grammanik Bank Spawning Aggregation Site (SPAG) and Frenchcap Cay, United States Virgin Islands, from April 24, 2011 to September 25, 2011 (NODC accession 0088064)
OAR	Ocean current velocity, temperature and salinity collected during 2010 and 2011 in Vieques Sound and Virgin Passage (NODC accession 88063)
NOS	2011 Benthic Habitat and Fish Monitoring data from St. John, St. Croix and Puerto Rico

New Publications in FY12

Source	Count
NESDIS	6
NMFS	50
NOS	64
OAR	13
NOAA	4
Miscellaneous	56
Total	193

The above table references, by Line Office, the number of CRCP-funded and other NOAA coral publications, websites, presentations, posters, brochures, videos, etc. that were added to the CoRIS virtual library in FY 2012.

In FY 2012, staff successfully added a total of 253 publications into the CoRIS virtual library and NOAA Central Library catalog.

Outreach Activities

- CoRIS provided material for the slide-show in the NOAA booth and a fact sheet about the project for distribution at the 2012 ESRI Federal User Conference and the ESRI International User Conference.
- CoRIS continued collaboration activities with the NOAA Ocean Acidification Data Management team to transfer knowledge about the ISO 19115 metadata standard and assist with metadata development through the creation of topic specific templates.
- CoRIS provided Geoportal demonstrations (<http://coris.noaa.gov/geoportal/>) to several groups within CRCP to demonstrate how the new search tool can be used and to gather ideas for the next upgrade.
- The CoRIS team briefed the NODC Marine Data Stewardship Division about the CoRIS project and the role of NODC within the Coral Reef Conservation Program.
- CoRIS met with the NOS metadata coordinator to discuss CRCP and NOS metadata requirements and identified next steps to ensure that metadata is made available from CoRIS and the NOS website, while minimizing the impact on the individual data provider.

Coral Reef Conservation Program Support

- CoRIS prepared an annual report and three quarterly status reports detailing web use trends and highlighting project accomplishments and CRCP Project Manager submissions related to metadata, data, publications, and information products.
- Staff continued to work with CRCP Line Officers to provide them with updates for their quarterly calls with CRCP Project Managers to obtain status updates on 2003-2012 products that are overdue and due soon.
- Staff tested and provided feedback on the implementation of the new CRCP project database system.

Collaborations

- CoRIS continues to participate in monthly coordination calls with the PIFSC Coral Reef Ecosystem Division and began quarterly calls with the NCCOS Center for Coastal Environmental Health and Biomolecular Research to discuss ongoing action items and outstanding CRCP products.
- CoRIS met with PIFSC CRED staff and NMFS InPort developers to discuss requirements of both systems with the end goal of the meeting being that documentation written in InPort can be used to satisfy all NOAA metadata requirements.
- CoRIS continues to participate as a member of the following CRCP Teams: Data Management Working Group, CRCP Project Proposal Database Requirements Team, and Deep Sea Coral Coordination Call.
- Staff attends the monthly Coral Collaboration calls.

- CoRIS participates in meetings and working groups that fall outside of the CRCP umbrella, NOAA Environmental Data Management Committee, NOAA Geoportal Team, NESDIS Information Resource Management Team Metadata Meeting, NODC IT Systems Meeting, FGDC Metadata Working Group, NODC Archive Management Working Group, NODC Web Team, and miscellaneous NODC Staff and Division Meetings.

Web Site Content and Technical Improvements

General

- CoRIS made updates to the website to increase the visibility of linkages between the CoRIS, CRCP, and USCRTF websites. The CRCP graphic identifier was added to all pages in the CoRIS website to brand the CoRIS search tool as a product of NOAA's Coral Reef Conservation Program. In addition, links to the CRCP and USCRTF websites are now included on every page of the CoRIS website.
- The color scheme of the CoRIS website was transitioned to a blue color palette similar to that currently utilized in the CRCP website. Based on recommendations in the CRCP Data Management Plan it was decided to launch one mobile Coral website with content from both CoRIS and the CRCP website. The CoRIS color palette was altered to reduce the visual differences between the two website.

Data & Publications

- Released the CoRIS Geoportal - a new data and publications search tool.
- ISO Web Accessible Folder (WAF) – We established an ISO WAF which contains metadata in ISO 19115-2 format (<http://coris.noaa.gov/metadata/ISO/>). The ISO 19115-2 metadata is generated from the existing FGDC CSDGM metadata using an XSLT transformation tool. The ISO WAF is updated daily and reflects the current holdings of the CoRIS FGDC CSDGM metadata catalog. Metadata transformation is presented as the 80% solution and additional edits may still be required to fix issues in the metadata introduced in the transformation and to add additional content to take advantage of new features in ISO that did not exist in the FGDC CSDGM standard.
- Added canned searches that are accessible through RSS feeds:
 - CRCP Tech Memo series
<http://coris.noaa.gov/geoportal/rest/find/document?searchText=noaaTechMemo%3Acrpc&start=1&max=50&f=georss&dojo.preventCache=1348084231347>
 - CRCP Technical Report series
<http://coris.noaa.gov/geoportal/rest/find/document?searchText=noaaTechReport%3Acrpc&start=1&max=25&f=georss&dojo.preventCache=1348084330558>
- Since 2009 the CoRIS geospatial metadata catalog has been accessible through the NBII Clearinghouse. The National Biological Information Infrastructure (NBII) program was terminated, and the website including the metadata catalog was shut down on January 15, 2012. The CoRIS metadata catalog is now available externally through

the USGS Core Science Metadata Clearinghouse (<http://mercury.ornl.gov/clearinghouse>).

Regional Portal

- The Regional Portal provides users with a wide range of region specific data and information from a single page. CoRIS continued to provide region specific updates to the fourteen (14) regions on the website.
- The CoRIS Regional Data Portals were added to the Digital Coast NOAA Coastal Services Center website. This provides greater visibility on the work the NOAA Coral Reef Conservation Program is doing. <http://www.csc.noaa.gov/digitalcoast/data/coris>

Activities – Recent Coral Publications

The following publications were featured on the CoRIS website in FY12:

- Coral reef ecosystems of American Samoa: a 2002–2010 overview – http://coris.noaa.gov/activities/am_samoa2010/
- Deep Sea Research and Technology Program 2012 Report to Congress http://coris.noaa.gov/activities/reportcongress_dscrtcp_2012/
- Computing Applications for Satellite Temperature Datasets: A Performance Evaluation of Graphics Processing Units <http://coris.noaa.gov/activities/nesdis-techmemo-139/>
- Implementation of the National Coral Reef Action Strategy: Report on NOAA Coral Reef Conservation Program Activities from 2010 to 2011 <http://coris.noaa.gov/activities/reportcongress2012/>

Glossary/Acronym & Abbreviation List

- The Glossary of Terminology is one of the most utilized resources on the CoRIS website and now has more than 6,390 terms. This year we added a mobile webpage for the CoRIS Glossary (http://www8.nos.noaa.gov/coris_glossary/glossary_mb.aspx) and the Acronym list (http://www8.nos.noaa.gov/coris_glossary/acronym_mb.aspx). The mobile Glossary has been incorporated into the CRCP mobile website (<http://coralreef.noaa.gov/m/>). This new format will allow the Glossary and Acronym List to be more easily accessed from a wider variety of platforms.
- An updated pdf version of the *CoRIS Glossary* was made available for download. The PDF Glossary was updated to include additional terms and has been expanded with a more user friendly means of navigation within the file. The Glossary continues to be one of the more popular documents on the website and the pdf of this document was accessed 35,417 times in FY12.
- CoRIS continues to update its Acronyms/Abbreviations List (<http://coris.noaa.gov/data/acronyms.html>), which now has more than 5,200 terms.