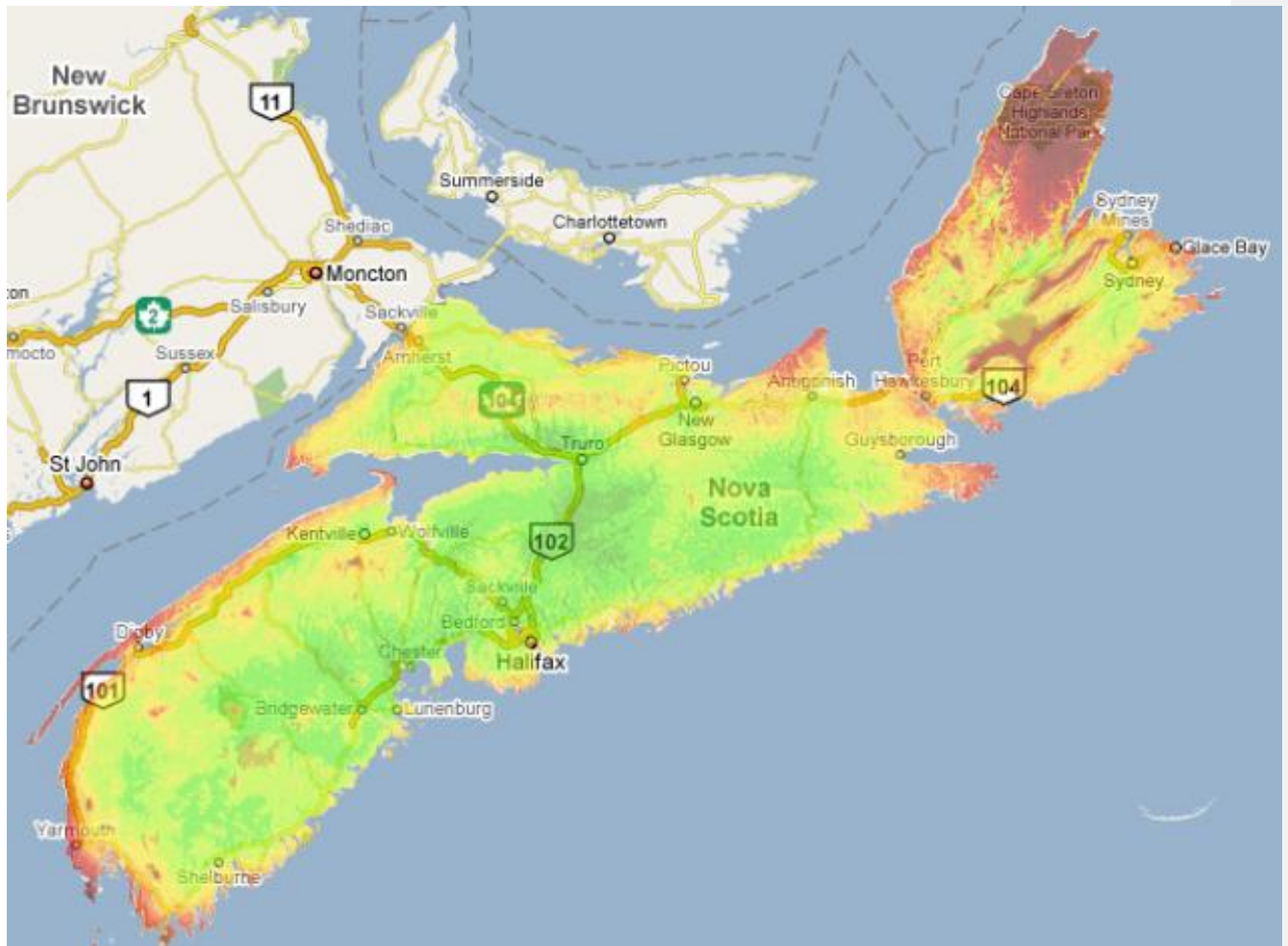


2008 / 2009 GeoNOVA Secretariat Annual Report

Field Cod

Prepared for: Deputy Minister of

Service Nova Scotia and
Municipal Relations



HIGHLIGHTS

This report reflects GeoNOVA's ongoing efforts to communicate corporate geomatics activities. Annual reports have been prepared and distributed to the Deputy Minister of Service Nova Scotia and Municipal Relations (SNSMR) as per the GeoNOVA Steering Committee's Terms of Reference. While it is primarily an internal report it may also be distributed to a broader executive audience within the Government of Nova Scotia.

GeoNOVA remains to be the Province's commitment and approach to developing and delivering corporate geographic infrastructure and information management systems. This program is built on a set of principles that continue to stand the test of time. In a fast paced and ever changing world these principles are as important today as when the GeoNOVA Program was first approved. The notion that geographic data and as well data aligned to geography should be created once and shared many times is still a dominant guiding principle used by GeoNOVA.

As with past Annual Reports this report includes sections outlining the accomplishments of 2008/09 and highlights related to the 2009/10 workplan. It is important to note that at the time of drafting this report the 2009/10 workplan had yet to be approved by the GeoNOVA Steering Committee.

2008/09 was a very exciting year for GeoNOVA. Here are some highlights of the Program's accomplishments:

1. Released version 1.1.1 of the Nova Scotia Geographic Catalogue. This version included numerous administrative enhancements to the software.
2. Partnered in the Nova Scotia Wind Atlas project with the Department of Energy, University of Moncton, and the Applied Geomatics Research Group – Launched *October 8, 2008*
3. Delivered the Spring into Geomatics conference. Event included presentations by more than 10 industry leaders and as well participation by all 145 attendees in defining the future direction of the Government of Nova Scotia's GeoNOVA program.
4. Building upon one of the top two recommendations coming out of the Spring into Geomatics event, carried out a preliminary evaluation of the impacts the Education system is or could have on the geomatics industry of Nova Scotia.
5. Through consultation with 15 main geospatial offices in both government and academia, developed a corporate data sharing model for access to geographic information (called the GeoNOVA Alliance).
6. Documentation of the NSCAF Strategic Direction/Vision.

Accomplishments for 2008/09

There are three key areas upon which to report GeoNOVA's accomplishments for 2008/09.

1. Program and Policy
2. Geographic Catalogue
3. Geographic Data Access

Program and Policy

Data agreements have been used in the geomatics field in Nova Scotia by different agencies for many years. Often, several different agreements were needed with numerous stakeholders being involved simultaneously. Geomatics stakeholders in Nova Scotia have been seeking an opportunity to remove the burden of managing these types of agreements. This was reinforced at the Spring into Geomatics 2008 conference, held in May 2008 in Truro where the attendees declared that the GeoNOVA Program should focus on creating and maintaining an environment for geospatial data sharing in the Province of Nova Scotia. In response to this the GeoNOVA Secretariat formed a working group to document and draft a legal agreement that would reflect the trust and spirit of a single data sharing environment in the province. Branded the GeoNOVA Alliance, this model is based upon principle that to be successful means to be collaborative, and benefits from collaboration could even flow to those outside the Alliance in the hope that those groups will see the value of becoming members and supporting the collaborative foundation of the Alliance. The draft frameworks have now been complete and in 2009/10 approval and implementation of the model will be the goal.

Established in 1992 to foster cooperation in Atlantic Canada with regards to integrated coastal and ocean management, coastal mapping and geomatics, the Atlantic Coastal Zone Information Steering Committee (ACZISC) plays an important role in coordinating inter-jurisdictional efforts relating to the coast. The GeoNOVA Secretariat fully supports ACZISC and is represented on the committee, which meets quarterly. The Secretariat contributes geomatics expertise to the group and during 2008/2009 was instrumental in ACZISC's COINAtlantic initiative; an online mapping application that provides search and display capabilities for coastal geography in Atlantic Canada.

The Municipal Geomatics Forum is a standing GeoNOVA Steering Committee workgroup that focuses on geomatics-related issues that impact Nova Scotia's municipalities. During 2008/09 there were two sessions for this workgroup. This group is co-chaired by four municipal staff representing their respective regions and the Manager of the GeoNOVA Program.

Part of the GeoNOVA Secretariat's mandate is to promote and create awareness of geomatics in Nova Scotia. During 2008/09, conferences that the Secretariat attended and or exhibited at included: ESRI Regional Users Conference (Fredericton, NB) and Geomatics Atlantic 2008 (Saint John, NB). GeoNOVA also hosted its own event back in May 2008 entitled "Spring Into Geomatics". More than 145 geomatics practitioners attended this one day event. Participants were provided information related to recent industry developments and were given the chance to share with GeoNOVA areas they would like to see focused upon in the coming years. Findings from the event were publicized on www.geonova.ca GeoNOVA has also continued to support the geomatics industry association in Nova Scotia (GANS) with representation on its Board of Directors. GeoNOVA brings a strong government voice to the association and is an advocate for a relevant and vibrant association. As well GeoNOVA is represented on the Nova Scotia Community College's Deans Advisory Council on Geomatics. The Council provides a forum for members of the geomatics community to discuss and contribute ideas and direction on the curriculum at the Centre of Geographic Sciences. In some instances awareness is facilitated by providing an advisory role in program activities. Nova Scotia Environment has called upon Secretariat resources to assist in applying

selected technologies in applications they are developing. They have also sought Secretariat assistance in establishing a geomatics centric working group within their department. In some instances awareness is facilitated by providing an advisory role in program activities. The Department of Environment has called upon Secretariat resources to assist in applying selected technologies in applications they are developing. They have also sought Secretariat assistance in establishing a geomatics centric working group within their department.

The Provincial Oceans Network (PON) continues to facilitate development of Nova Scotia's State of the Coast Report with a goal to developing a Coastal Management Strategy for the Province. PON is composed of representatives from provincial departments and agencies with responsibilities and interests in coastal and ocean management. The GeoNOVA Secretariat provides representation on this committee offering perspectives on the importance of geospatial information to assist with the future strategy.

A role of the GeoNOVA Secretariat is to present its partners with geomatics related funding opportunities. One of the funding programs that have been around for a while is the federal GeoConnections Program, hosted by Natural Resources Canada. The Secretariat continued to work with Nova Scotia Environment, Health Promotion and Protection, Department of Finance (Community Counts), and Emergency Measures Organization (EMO) to look into potential funding opportunities. At this time, work continues with Nova Scotia Environment and EMO.

In 2008/09 the GeoNOVA Secretariat's management consulting skills were called upon when the GeoNOVA Steering Committee requested a documented vision and strategic direction for the Nova Scotia Civic Address File (NSCAF). This very rich data set has been invested in substantially by the Government of Nova Scotia. The opportunities to apply this critical piece of data within a wide variety of government business practices must now be realized. The GeoNOVA Steering Committee received the documented vision component of this work prior to the end of fiscal. At the start of 2009/10 the Secretariat will complete the strategic directions piece by documenting the roles and responsibilities of key stakeholders of the NSCAF.

One of the findings from the afore mentioned "Spring into Geomatics" conference related to the continued development of a qualified, skilled labour force in support of the industry. Specific questions were raised as to the role of the education sector in supporting, strengthening and providing growth potential for the industry in Nova Scotia. GeoNOVA initiated a review of the Education sector's role in educating and training people for the future. The findings of this work will be published on www.geonova.ca

Geographic Catalogue

The Nova Scotia Geographic Catalogue is the Province of Nova Scotia's listing of geographic products, with over 3000 holdings. Over one hundred data custodians manage their respect holdings through the Nova Scotia Geographic Catalogue software and they do so via the Internet. In the fall of 2008, version 1.1.1 was released with enhancements focusing on improving the administrative functions of the tool. Work began early in 2009 on version 2.0 with the goal of enhancing the public search tool interface.

The Nova Scotia Geographic Catalogue is built upon industry standards supported by the Canadian Geospatial Data Infrastructure. This year the impacts of applying these standards was realized when COINAtlantic's efforts under the direction of the ACZISC sought to leverage the information found in the Nova Scotia Geographic Catalogue and service the information needs of the coastal and oceans management sector. Nova Scotia's coastal communities can now access a library of geographic information from either GeoNOVA or COIN but only ever really interact with one source of information.

Maintenance of the Catalogue remains top of mind for GeoNOVA. Consultations with Data Custodians are a part of the Secretariat's ongoing efforts when considering these valued records. Meeting with, and providing training for our partners is a key part of making certain that the Geographic Catalogue remains a current and effective tool for promoting Nova Scotia geography. GeoNOVA is always interested in documenting "new" data sets in the catalogue thus, during 2008/09, the GeoNOVA Secretariat consulted with several groups about incorporating details about their geographic products into the Catalogue including: Cape Breton Regional Municipality and the Applied Geomatics Research Group.

Geographic Data Access

In any given year the GeoNOVA Secretariat works closely with more than 50 different partners in Nova Scotia to promote access to geographic data. There are many channels for accessing geographic products, with online tools continuing to lead as a favoured option. One method of online geographic data access is the use of mapping services, and specifically Web Map Services, or WMS. WMS is a convenient technology for developers who are seeking to add map content into their applications, and for users who want to display maps either on the Internet or in GIS software that has an Internet connection. During 2008/09, the Secretariat worked with the Department of Energy to use WMS as part of their online Wind Atlas application. In addition to these efforts, GeoNOVA worked with the Department of Natural Resources encouraging them to release several new web mapping services for client consumption including: Nova Scotia Wetlands; Nova Scotia Groundwater; Nova Scotia Surficial Geology; Nova Scotia Geoscience Maps, Databases and Images; Nova Scotia Significant Habitats; Hurricane Juan; Nova Scotia Ecological Land Classification; Restricted and Limited Use Land; Mineral Resource Land-Use Atlas.

Even with the desire to access mapping data via technologies such as web services there still exists a healthy portion of the geomatics community who need, and will always need, access to raw data. That is why GeoNOVA offers the web based Data Download Service. In 2008/09 efforts were underway to take the functionality within GeoNOVA's existing service (released early fall, 2006) and merge them with those found in the Nova Scotia Geomatics Centre's Data Locator utility. The functional requirements definition and project plan are nearing completion.

Budget limitations prevented GeoNOVA from following through on several favourable successes from 2007/08. GeoNOVA was unable to take the mobile site selection tool piloted with Economic Development and deploy it into production. Additional enhancements to the Atlas of Nova Scotia were also put on hold. Web site enhancements had to also be put on hold, but it is anticipated that the desire to improve the web site will align well with SNSMR's e-Services plan to improve web sites for the entire department (a 2009/10 project now in the planning stages).

GeoNOVA continues to dialogue with and informally strategize with the Corporate IT Office. In part, to ensure areas such as the Provincial Data Centre are equipped to deliver geospatial data on behalf of the stakeholders. In 2008/09 GeoNOVA identified at least two program areas who were acquiring the same GIS technologies for implementation in the Provincial Data Centre (Nova Scotia Environment and Elections Nova Scotia). Through the coordinating efforts of the GeoNOVA Secretariat a single Enterprise solution was acquired and deployed to service the needs of the two parties and the interests of Service Nova Scotia and Municipal Relations were added to the project. At the end of the fiscal year GeoNOVA became aware of a forth agency who now wishes to explore taking advantage of this new Enterprise environment. As this opportunity grows it will become imperative that government look at a formal architecture review of geospatial needs within a corporate environment.

There is wide ranging support within the Government of Nova Scotia for integrating Business Intelligence systems such as Cognos with Geographic Information Systems. Both types of systems have their own unique strengths: IBM Cognos is a world-class Business Intelligence system allowing users to report,

analyse, and share their data; while Geographic Information Systems such as ESRI's ArcGIS Server allow business data to be viewed and analysed within the context of location. Exposing the strengths of both systems through one interface will allow users a rich experience by presenting BI data through geography. GeoNOVA therefore undertook a small pilot project to display data from an IBM Cognos BI environment within an interactive, Internet-focussed GIS. The GIS technology deployed for this pilot is the ESRI ArcGIS Server platform.

GeoNOVA Secretariat Staff, 2008/2009

Each of the following played an important part in the GeoNOVA Secretariat's accomplishment in 2008/09:

Danny Gray, Director, Geographic Information Services
Tony Matthews, GeoNOVA Program Coordinator
Colin MacDonald, GeoNOVA Program Coordinator
Ed Light, GeoNOVA Program Manager

We would like to take this opportunity to recognize and thank all who have and continue to contribute to the corporate commitment of this government in moving the GeoNOVA Vision forward. Key departments and agencies last year included: Environment, Natural Resources, Elections Nova Scotia, CITO. And while the Secretariat and the Nova Scotia Geomatics Centre are part of the same department GeoNOVA would also like to recognize the NSGC's contribution. The efforts of our Municipal stakeholders must also be recognized. They are of course a client of all things GeoNOVA strives to deliver and they are a key contributor to the GeoNOVA vision and goal of collecting data once, as close to source as possible, and shared many times.

2009/10 GeoNOVA Work Plan – A Look Ahead

The economic downturn realized world wide in 2008/09 has not gone unnoticed in the geomatics sector here in Nova Scotia and the GeoNOVA Program is not immune to the impacts such economic realities present. Therefore 2009/10 will have its challenges, but they also translate well into opportunities for the industry in this part of the world. Efficiencies are all the more imperative, partnerships are a requirement, streamlined decision support processes must continue to be introduced. GeoNOVA is key.

This section presents a preview of the 2009/2010 GeoNOVA Secretariat work plan however at the time of preparing this report the specifics of the 09/10 plan had not yet been approved by the GeoNOVA Steering Committee.

Please note: Items in white rows reflect operational activities; items in pale yellow rows reflect project activities

Proposed Activity	Program Area	Type	Description	Quarter
GeoNOVA Steering Committee	Program and Policy	Committee	Provide Secretariat support to the GSC.	Q1,2,3 &4
GeoNOVA Alliance Working Group	Program and Policy	Committee	Continued work of the Alliance group as determined from fiscal 08/09.	Q1
Corporate Geospatial Infrastructure Working Group	Program and Policy	Committee	Establish a Corporate Geospatial Infrastructure WG. Initial role is defined in terms of the recently acquired ArcGIS Server technology. Expanded role may include overseeing Corporate Infrastructure Architecture plan.	Q1,2,3 &4
Geomatics Atlantic 2009 Organizing Committee	Program and Policy	Committee	Carryover commitment from 08/09 - Geomatics Atlantic 2009 to be held in Wolfville NS in June.	Q1
Municipal Geomatics Forum	Program and Policy	Committee	Ongoing forum for engagement of municipalities in municipal geomatics issues. 2-4 meetings will be held in 2009/10 depending upon topics generated by the Municipal Co-chairs.	Q1,2,3 &4
Provincial Lidar Strategy Working Group	Program and Policy	Committee	Establish Lidar WG - investigating the opportunities to apply technologies in GNS.	Q1&2
Education and Geomatics Working Group	Program and Policy	Committee	Establish the Education and Geomatics Working Group - Initial task to develop a Strategy in addressing geomatics gaps in education	Q2&3
NSE Water Strategy IM Working Group	Program and Policy	Committee	Participate in the Department of Environment's Water Strategy Information Management Working Group as government's geomatics lead.	Q1,2,3 &4

NSCAF Strategy Working Group	Program and Policy	Committee	Continued facilitation and participation in the NSCAF working group (SNSMR only participation)	Q1
GeoNOVA Annual Report 2008	Program and Policy	Commun's	Draft the 08/09 Annual Report and deliver it to the GSC and as well SNSMR DM.	Q1
GeoNOVA Annual Report 2009	Program and Policy	Commun's	Draft the 09/10 Annual Report and deliver it to the GSC and as well SNSMR DM.	Q4
GeoNOVA Strategic Direction Report	Program and Policy	Commun's	Draft the GeoNOVA 5+ year Strategic Directions Report (based in part upon the Spring Into Geomatics conference held in May 2008)	Q1
Education and Geomatics Initiatives	Geographic Data Access	Outreach	Capitalize on the 08/09 deliverables. Actual tasks have yet to be defined, most of which will come from the yet to be established WG however it is anticipated efforts will focus on what can be done in the public school system - subsequently requiring a strong partnership with the Department of Education..	Q3&4
Geomatics Atlantic 2009 Attendance	Program and Policy	Outreach	Participate at Geomatics Atlantic 2009 - booth and session participants	Q1
Celebrating Communities Conference	Program and Policy	Outreach	GeoNOVA booth at the Celebrating Communities Conference (held every two years)	Q2
Enterprise License Agreement	Program and Policy	Standards and Policy	Manage the ELA - assumes TCA funding approval.	Q2,3 &4
Nova Scotia Topographic Database Strategic Directions Report/Plan	Program and Policy	Strategy	Develop a 5+ yr strategy for the Nova Scotia Topographic Database Program. Contract out development of Strategy - Statement of Work has been drafted reflecting extent of work. Estimated completion date of October 31 2009.	Q1&2
GeoNOVA Alliance Model Implementation	Program and Policy	Strategy	Develop an implementation plan for rollout o the Alliance model including: communications; establishment of the first 2 Alliance partnerhsip agreements.	Q2,3 &4
DataDownload Service	Geographic Data Access	Access	Develop project plan and deliver Version 3.0 of the newly merged GeoNOVA Data Download with Data Locator Download functionality. Evaluate the resulting tool with a geomatics focus group.	Q2&3

Corporate Geospatial Infrastructure Architecture Plan	Geographic Data Access	Geomatics Capacity Building	Initiate the development of a Corporate Geospatial Infrastructure Architecture Plan for the GNS. Broad stakeholder consults required. Architecture review and planning will be in areas including but not limited to data, networks, and storage.	Q2,3 &4
NSE Needs Analysis	Program and Policy	Geomatics Capacity Building	Provide facilitation and consulting services, delivering a GIS User needs analysis for the Department of Environment.	Q2&3
NSCAF Strategy / Report	Program and Policy	Strategy	Document vision as defined by NSCAF Strategy Working Group and communicate results with stakeholders	Q1,2&3
Geomatics Awards Program	Program and Policy	Strategy	Development of a GeoNOVA Awards program highlighting industry accomplishments	Q3
GeoNOVA Portal re-design	Geographic Data Access	Access	Deliver a new GeoNOVA web based in part upon the design, function and flow as provided by SNSMR e-Services. As well assist the NSGC and Lands teams plan the content necessary to support both ANS and GeoNOVA mandates.	Q2&3
NSCAF Standards	Geographic Data Access	Standards and Policy	Develop, approve and promote the NSCAF standard throughout GNS.	Q2,3 &4
GeoNOVA Alliance Brochure	Program and Policy	Commun's	Draft GeoNOVA Alliance Fact Sheet as part of GeoNOVA Communications Kit and Alliance Communications plan	Q2
NSCAF Public Viewer Release and Promotion	Program and Policy	Commun's	Develop a promotions plan for the NSCAF public viewer	Q3
Lidar Position Paper	Program and Policy	Strategy	Deliverable from the Lidar WG - Defining the opportunities, etc. for the GNS	Q4