

The Centre for Community Mapping (COMAP) is a non-government-organization that provides web-based solutions for communities of practice that include or are led by civil society.

COMAP deploys new technologies developed over a 16 year research effort led by the Computer Systems Group of the University of Waterloo. Called the Web Informatics Development Environment (WIDE) the new system will be served by COMAP under beneficial arrangements for application service provision (ASP).

WIDE applications leverage economies afforded through:

- use of World Wide Web Consortium software standards
- common mapping drawn from spatial databases over the web
- rapid build database to web application services, that typically do not require programming in code
- a suite of extensive software components that can be assembled to build application functionality
- over the web concurrent application design and refinement driven by practitioners
- ASP cost sharing by communities of practice

COMAP applications operate in distributed data contexts and respect the data ownership, administration and client relationship needs of partners in collaborative information management initiatives.

COMAP uses a shared map appliance (Common Map) in a web browser as a context for communication of land related information, with simple visual tools for data transactions:

- mapping feature and attribute data capture (& sharing with GIS)
- mapping and content searching and reporting

Using COMAP:

- Consultation processes are democratized
- Project scale geospatial information system (GIS) layers can be updated by practitioners using COMAP spatial data transactions
- Standard protocol based applications, that enable data comparison across multiple jurisdictions, can be deployed via partner websites
- Complex data analyses can be generated, with dynamic graphing, based on parameters and map areas selected by users requiring visualizations for decision support

## centre for community mapping

- Community of practice directories and planning calendars , maintained by participants will provide secure access to applications

Applications under way and under consideration in Ontario will support the operations of communities of practice that include federal agencies, provincial ministries, conservation authorities, non-governmental organizations, foundations, university based researchers commercial and industrial organizations and the general public.

Typically, 'test-bed' research for application development conducted in the Region of Waterloo and environs will be modeled with partners in a larger landscape such as the oak Ridges Moraine and then extended to more extensive geography such as the Greenbelt and southern Ontario.

Details on projects that are operational, submitted for funds or contemplated may be found at [www.comap.ca](http://www.comap.ca).

Communities of practice address issues in the public interest that require collaborative action. Several examples of this activity currently contemplated:

- Adaptive management of ecosystem restoration by diverse conservation organizations in conditions of climate change
- Ecosystem management based on evolving common standards for aquatic and terrestrial monitoring
- Policy compliance, governance capacity and efficacy monitoring (with integrated ecosystem monitoring reporting)
- Cultural landscape portraits of rural communities with content (histories, genealogies, build heritage descriptions, media, archival data) entered by residents and students and portrayed to encourage tourism
- Local asset based community economic development and services to the 211 network.

COMAP will be supported by a for-profit sister corporation called Mapadit; an ASP for municipal planning services, food supply chain tracing, epidemic management, public safety management, community care management, economic development and consumer services etc.