



CONSERVATION BIOLOGY INSTITUTE
NORTH PACIFIC LCC GATEWAY PROPOSAL
May 1, 2013



The Conservation Biology Institute (CBI) proposes to develop a “gateway” using Data Basin technology (www.databasin.org) to serve the data integration, collaboration and outreach needs of the North Pacific LCC. Gateways are a customized interface of the Data Basin platform that includes special branding, curation of spatial content, direct links to selected sites (e.g. LC Map), additional upload capacity if needed, and access to premium analytical tools. The proposed gateway will allow the NPLCC support team and its intended audience to integrate spatial information to coordinate and promote conservation throughout the region. By default, the proposed gateway will include all existing functionality of Data Basin, but the gateway can be tailored to meet the needs of the NPLCC. Data Basin is composed of multiple components that can be easily customized. For example, NPLCC leadership may wish to eliminate some discrete components of the full system (e.g. user-defined working groups, access to all of Data Basin, and analytical tools) if deemed undesirable for the purposes of the NPLCC.

Features

Data Basin is an innovative web-based spatial visualization and analysis platform for conservation data and information that is powered by cloud computing. Users access Data Basin or any of its gateways using any one of several web browsers (Firefox, Chrome, Safari, or Internet Explorer) – no download of proprietary software is required – making the system easily accessible from any location provided Internet services are available. The latest version of Data Basin and all of its existing gateways is scheduled for its next version release in January 2013, which includes numerous enhancements.

Data Basin manages several important content types including –

	Datasets are member-uploaded spatial information, typically created using a Geographic Information System (GIS). They can be visualized and analyzed using mapping tools in Data Basin, and downloaded for use in desktop GIS software.
	Maps are member-created dynamic web maps of spatial information, including datasets, drawings, and basemaps. They can be used to easily combine information and shared with others.
	Galleries are created by users to easily showcase and share spatial information as a cohesive collection. They are very useful for creating a digital atlas, for organizing a set of related datasets and maps, or providing a diverse collection of resources on a particular topic.
	Guides & Case Studies is the newest content type being supported by Data Basin and includes user-generated examples of how specific datasets were used to address a particular subject or problem.
	On-line Analytical Tools are premium services offered that are continually being developed to support user needs. For example, a popular tool is called the Project Impacts Calculator that allows the user to analyze the potential impact of a proposed management action on a wide range of spatial data on-the-fly.
	Groups are created by Data Basin members to collaborate, negotiate, or conduct peer review around spatial data. Groups can be public or private.



Members are a valued resource in Data Basin and we provide easy search functions to locate other people of similar interest or specific expertise.

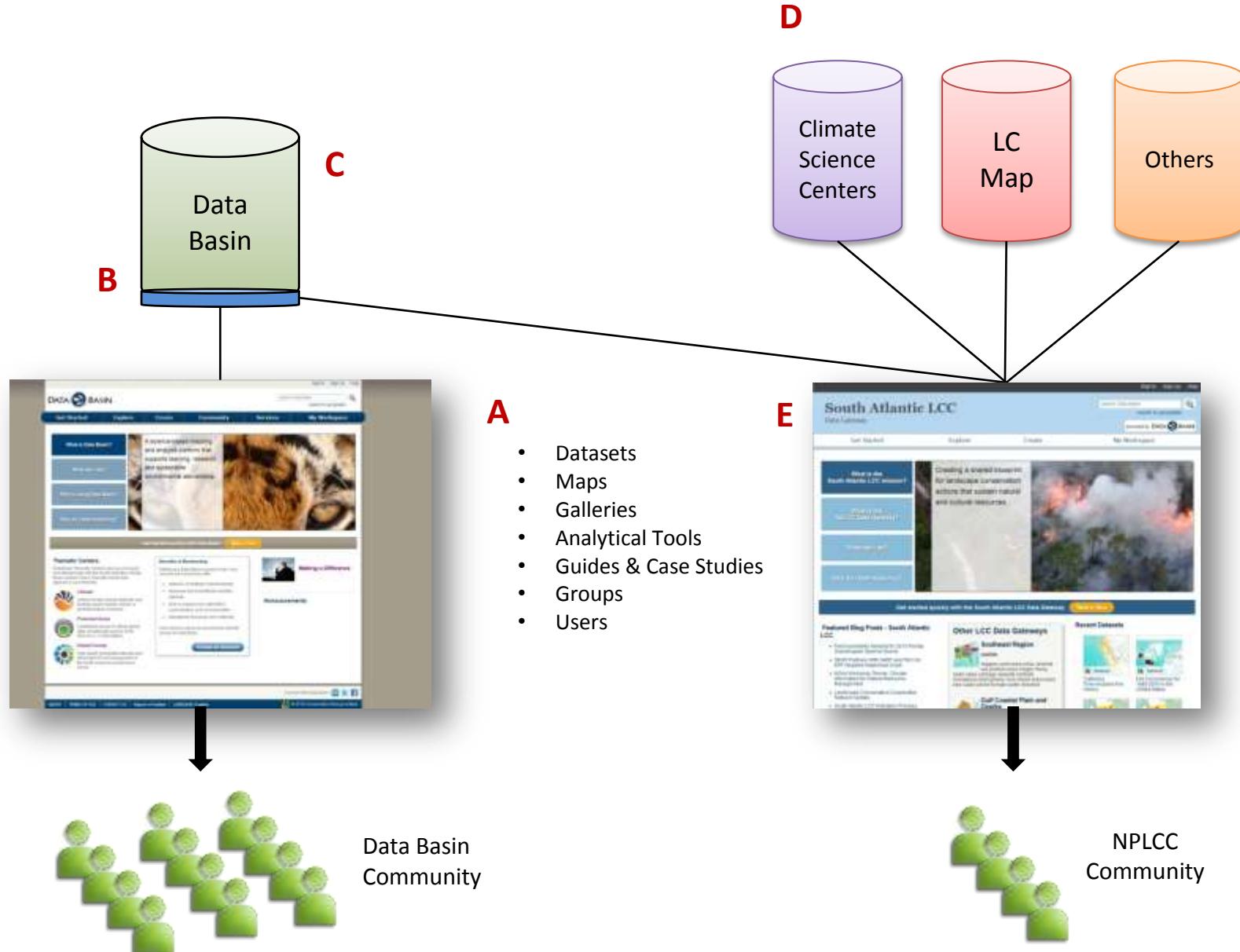
Data Basin can provide hosting services but it can also readily link to other data portals as desired. For example, Data Basin is currently linked to LC Map and several other government sites. In the case of LC Map, additional capabilities are being developed. For example, in order for the analytical tools to function properly, special programming linking the sites more intimately is required. In addition, support for some open source web map services and web feature services are being developed making the system more flexible and robust.

Using the South Atlantic LCC gateway as the visual example, the diagram presented below demonstrates how a NPLCC gateway might be linked to the various other data portals and how it would relate to the larger Data Basin system. The diagram also highlights decision points CBI and NPLCC will need to address. Corresponding to the letters in the diagram, they are -

- A- NPLCC will need to determine which of the Data Basin building blocks it would like to retain from this list.
- B- It is assumed that a subset of the nearly 10,000 Data Basin datasets (i.e. those pertinent to the ecoregion) will be tagged to the proposed NPLCC gateway.
- C- The NPLCC leadership will need to decide whether or not NPLCC gateway users will be given the option to access other Data Basin data if they choose.
- D- The NPLCC gateway will be directly linked to LC Map and other sites as deemed valuable (e.g. NW climate science center)
- E- CBI will work with NPLCC to customize their branding and overall design to best serve their specific user community.

Proposed Timeline

CBI will have a skeleton version of the gateway built and ready for review by the end of June 2013 provided we can finalize a contract or purchase order by June 1st. Depending on the timing of review and decision making by NPLCC, we can anticipate a public launch of the gateway by late summer 2013. It is anticipated that complete integration between LC Map and Data Basin will be achieved by this time.



Budget

The normal startup price for a government gateway is \$50,000; however, we are offering this service at **\$25,000** as we can leverage our startup costs with other matching funds and substantial hosting costs will be handled by LC Map. If chosen, existing analytical tools will be made available for 6 months after launch of the site for this price after which time an assessment will be made to set a maintenance fee for continual use of the tools. Maintenance cost beyond year one for the gateway will be set at \$8,000-\$10,000 per year depending on usage volume, which will be monitored and reported out to NPLCC. The \$25,000 startup fee includes –

- Custom branding throughout
- Full Data Basin functionality
- Up to 5GB of data hosting for designated account
- Admin control over gateway content
- Link to LC Map spatial data
- Direct access to all Data Basin content if desired
- Up to 50 groups and all associated collaboration tools
- User webinars (up to 4) and tutorials throughout the site
- Trouble-shooting

Assumptions & Limitations

To achieve these tasks, a discrete amount of staff time is included. Up to 100 hours of programmer/web designer time and 20 hours of intern time is provided for this startup fee. Scope that goes over this amount will need to be negotiated for additional funding. CBI will work closely with staff representing the NPLCC during development of the gateway to ensure that LLC needs are adequately addressed during the customization phase. Data management needs will be addressed collaboratively with LCC staff. CBI will also provide user support and training to LCC staff for use and administration of the gateways within Data Basin.

Customization is limited to those aspects of Data Basin that permit ready customization; not all features within Data Basin were designed to be customizable. CBI will work closely with LCC staff to address customization within these limits.

Access to premium tools such as the Project Impacts Calculator will be made available to a working group within the gateway (LCC staff will manage membership of this group); membership will be limited to no more than 30 users.