The Digital Basin

Assets & Indictors Decision-making Brief

## Digital Basin

In an effort to provide access to current data relevant to Basin-Boundary decision makers, the RDI and Selkirk Geospatial Research Centre (SGRC) worked together for two years to create one of the most complex web mapping applications ever attempted in Western Canada in both the range of information layers provided and the forms of information made available, including tables, charts, ‘Trends Analysis’ reports and interactive maps. The Digital Basin, released in May 2014, now houses over 100 asset and indicator data layers, including data obtained from local governments, non-profit organizations, and researchers working across the Basin-Boundary region. The framework of the Digital Basin is based on the 4 pillars of well-being (economic, social, cultural, environmental) and 16 indicator thematic areas.

## Future Development Approach

The RDI and SGRC teams will work together to ensure existing data layers remain up-to-date and the Digital Basin tool is maintained. Any future development to the functionality of the Digital Basin tool will be based on a rationale supported by Digital Basin users. Any plans for significant development upgrades to the tool will be done in consultation with Columbia Basin Trust. It is anticipated that new datasets will become available, some of which should be added to the Digital Basin. It is also recognized that not all new datasets need to be available to the diverse audience that the RDI anticipates will use the Digital Basin. The following process outlines future decision-making related to the addition of new asset and indicator data layers to the Digital Basin tool.

## Process

1. Researcher responsible for each indicator thematic area identifies new potential datasets that could fill an identified data gap or replace an existing data layer (an improved dataset for an existing layer).
2. Researcher consults with Selkirk Geospatial Research Centre (SGRC) to determine the cost to upload data layer to the Digital Basin tool.
3. Researcher consults with external stakeholders as needed to gather information related to data integrity, usefulness, understanding and resonance.
4. Researcher completes Data Layer Selection Form (see attached), including a decision-making matrix and a text-based description of the data layer, data integrity, data usefulness, understanding & resonance, and target users/uses (including a list of stakeholders who were consulted).
5. Data Layer Selection Form is presented to the RDI Research Team one week in advance of a scheduled team meeting.
6. Data layer and related Data Layer Selection Form are discussed by the RDI Research Team and consensus on scoring is reached.
7. Data layers with score of 70% or more will be added to the Digital Basin and data layers with score of less than 70% will be withheld until such time as conditions have changed in a way that may improve the score (“next steps” related to the RDI’s management of the dataset will be noted)
8. Data Layer Selection Form is finalized and uploaded to the RDI’s Metadata tool alongside other information relevant to management of the dataset.
9. Researcher coordinates with SGRC to arrange for uploading of the layer to the Digital Basin.
10. SGRC provides monthly summaries of RDI-related hours according to:
    1. New data layers uploaded
    2. Updates to existing layers
    3. Digital Basin Maintenance
    4. Mapping related to the RDI’s applied research projects
    5. Development of new Digital Basin functionality
    6. Other

## Digital Basin Data Layer Selection Form

Describe the data layer

Click here to enter text.

Comment on the integrity of the data

Click here to enter text.

Comment on the usefulness, understandability and resonance of the data

Click here to enter text.

Identify target users and potential uses of the data

Click here to enter text.

List the stakeholders consulted while assessing the data layer

Click here to enter text.

Complete the Decision-Making Matrix (next page)

## Data Layer Decision-Making Matrix

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CRITERIA | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| DATA INTEGRITY | | | | | | | | | | |
| *Data availability and cost*  10: Data are readily available  1: Data are not available or data are only available at significant cost |  |  |  |  |  |  |  |  |  |  |
| *Data reliability*  10: Data are collected at analyzed using sound methods and can support sound conclusions  1: Data are/may be unreliable |  |  |  |  |  |  |  |  |  |  |
| *Data condition*  5: Data are available in a state that is readily interpretable  1: Data require significant manipulation or analysis to generate results |  |  |  |  |  |  |  |  |  |  |
| *Historical data*  5: Historical data are available at an appropriate time scale  1: Historical data are not available |  |  |  |  |  |  |  |  |  |  |
| *Spatial Representation*  10: Data are available for the entire area of interest and allow for analysis at finer scales  1: Data are not available for significant portions of the region |  |  |  |  |  |  |  |  |  |  |
| USELFULNESS, UNDERSTANDING AND RESONANCE | | | | | | | | | | |
| *Relevance*  10: The indicator or asset relates to an issue that is important to well-being  1: The indicator or asset relates to an issue that is not important to well-being |  |  |  |  |  |  |  |  |  |  |
| *Regional Applicability*  5: The indicator or asset relates to a factor that is important across the entire area of interest  1: The indicator or asset relates to a factor that is only important to select areas |  |  |  |  |  |  |  |  |  |  |
| *Decision-support*  10: The indicator or asset provides information that is important for decision-making related to well-being  1: The indicator or asset provides information that is not important for decision-making related to well-being |  |  |  |  |  |  |  |  |  |  |
| *Broader applicability*  5: The indicator or asset can be, or is being, utilized to understand important issues other than well-being  1: The indicator or asset cannot be used to understand other important issues |  |  |  |  |  |  |  |  |  |  |
| *Concreteness/Specificity*  5: The indicator or asset is transparent and clearly defined  1: The indicator or asset is complex and vague |  |  |  |  |  |  |  |  |  |  |
| *Understandability/Accessibility*  5: Users can clearly understand the significance of changes to the indicator or asset inventory  1: The significance of changes to the indicator or asset inventory are poorly understood by users |  |  |  |  |  |  |  |  |  |  |
| *Public Awareness/Support/Interest*  5: The indicator or asset (including its supporting data) is acceptable to all stakeholders  1: The indicator or asset is controversial and likely unacceptable to users |  |  |  |  |  |  |  |  |  |  |