

Colorado Water Conservation Board

CWCB Website Evaluation Document

22 October, 2009

Prepared By:

Access Data Consulting Corporation

Table of Contents

Evaluation of the CWCB Website	3
Overview:	3
Existing Website Log Analytics	3
First Impression	6
The Website and Data	7
Home Page	7
Home Page Focus.....	7
Home Page Body.....	7
Internal Page Structure	9
Applications	10
Calendar Applications	10
Laserfiche Applications.....	10
Fonts CSS and Colors	10
Navigation	10
Links.....	10
Accountability	10
Dates of Updates.....	11
Recommendations	11
Overview	11
Home Page	13
Internal Pages	14
Proposed CWCB Conceptual Site Diagrams	14

Evaluation of the CWCB Website

Overview:

The current Colorado Water Conservation Board (CWCB) website hosts a large amount of information that is organized into areas similar to the internal organization of the CWCB. The information presented on the website can be valuable and beneficial but if the user is not familiar with CWCB's structure, finding pertinent information is not very intuitive.

The internal structure of the CWCB contains a number of individual sections, which have specific responsibilities. The sectional breakdown, although functional from an operational standpoint, has created a website that is difficult to navigate and locate information.

The goals of this evaluation are to:

1. Explore alternative approaches.
2. Make recommendations that enable the customers of CWCB to have a more positive perception of its services.
3. Reduce barriers for finding information.
4. Improve interaction and use of services provided by CWCB.

Existing Website Log Analytics

The analytics on the existing CWCB website, <http://cwcb.state.co.us>, provide some insight on how the site is being accessed. The following analytic information includes page viewing, browsers and operating systems used, screen and color resolution and connection speed metrics.

PAGE VIEWING 8/10/2008 – 8/10/2009	
Unique Users:	35,589
Visits:	80,145
Page views:	214,319
Daily average visits:	218.98
Daily average page views:	585.57

BROWSER USAGE		
Internet Explorer:	74.80%	IE7.0 accounts for 72.58%
Firefox	20.52%	
Safari:	3.16%	
Chrome:	0.73%	

SCREEN RESOLUTION	
97% of the screens are 1024 x 768 or greater	
1024 x 768	35.97%
1280 x 1024	22.74%
1280 x 800	11.55%
1680 x 1050	9.36%
1440 x 900	5.55%
Below 1024 x 768	2.92%
Mobile viewers at 320 x 396	0.21%

COLOR RESOLUTION	
32 bit color	91.63%
24 bit color	5.38%
16 bit color	2.96%

CONNECTION SPEEDS	
Unknown	54.76%
T1	15.05%
Cable	13.54%
DSL	13.53%
Dialup	2.50%
OC3	0.54%
ISDN	0.08%

OPERATING SYSTEMS	
Windows	60.1%
Unknown	36.92%
Macintosh	2.61%
Linux	0.35%
Unix	0.01%

First Impression

After reviewing the *Colorado Water Conservation Board Strategic Marketing Plan* (marketing study), the first approach discussed was to structure the website based on user type. After meeting with the individual sections of the CWCB, this approach was found to have a number of shortcomings:

1. The need to maintain multiple paths, which will create additional maintenance.
2. The user would not be provided with useful navigation choices.

In order for the navigation to work by user type, a category would need to be picked first, followed by a user type. Even with just a few user types defined, the navigational structure would become very complex and time consuming to maintain. The navigation would require additional mouse clicks and would penalize the more sophisticated user.

Due to the limited benefit for most users, this approach would not justify the additional maintenance required to facilitate this methodology.

The Website and Data

Home Page

Home Page Focus

When visiting the home page, the eye initially focuses on the banner image and the top level maroon menu buttons. The first text that gets focus is the white title text “Colorado Water Conservation Board”. The menu items are harder to focus on since they all are multi-line. The far left menu item “Board and Administration” is the first menu item that gets focus.

Home Page Body

The body of the page starts with a brief introduction, without a header, and the first noticeable text is a link, with a yellow background, to the board of directors meeting. Keywords are not promoted in a header and reused in the text below

There is a large amount of data maintained on the website. This data is held in a structure that imitates the sections of the CWCB and uses the names of the individual sections as menu titles.

The current CWCB home page is shown in Figure 1 below. If a website visitor is not familiar with the organizational structure of the CWCB, s/he may not know which section contains the information desired or what type of information is available in the various sections. When the individual CWCB sections were interviewed, a common theme indicated they could not find items outside of their sections. This input, along with the marketing study, suggests the site is not structured in a way to facilitate navigation for the customers of CWCB.

In summary, the web pages and data could be better organized through a menu structure that is categorized by type of information, rather than the section hierarchy of the CWCB. The recommendation section of this document provides additional detail on the proposed menu configuration.

Colorado Department of Natural Resources Home | Contact Staff | Colorado.gov | Search: Go

Colorado Water Conservation Board

Conserve, Develop, Protect, and Manage Colorado's Water for Present and Future Generations

- Board & Administration
- Water Information
- Water Supply Protection
- Watershed Protection & Flood Mitigation
- Stream & Lake Protection
- Water Supply Planning & Finance
- Water Conservation & Drought Planning
- Intrastate Water Management & Development

Mission & Strategic Plan
Services & Programs
Information Releases
Calendar
Statutes
Public Records
Forms & Documents
River Basin Facts
Climate Change
Sign Up for CWCB News & Information

Welcome! The Colorado Water Conservation Board (CWCB) represents each major water basin, Denver and other state agencies in our joint effort to use water wisely and protect our water for future generations.

For a summary of the CWCB Board's most recent activities, please see the most recent Board meeting agenda and the bi-monthly Director's report.

Next Board Meeting: September 15-16, 2009 - Steamboat

CWCB News

- CWCB Board Meeting - 9/15
- CWCB Board Meeting - 9/16
- CASFM Annual Conference - 9/16
- CASFM Annual Conference - 9/17
- CASFM Annual Conference - 6/18
- Colorado's Water Needs Get a Fresh Look in New Reports
- IMPORTANT: WATER EFFICIENCY GRANT FUNDING UPDATE
- 2010 Instream Flow Recommendations viewable with Google Earth
- 2009 Rainwater Harvesting Legislation & FAQ's

Frequently Used Links

- CWCB Calendar
- Contact Staff
- July 2009 Board Meeting Agenda
- Loan Feasibility Study Examples
- Board Meeting Dates & Agendas
- Board Members

Meeting Colorado's Future Water Needs: CWCB's Role
See how CWCB funds Statewide Programs without using any state General Fund tax dollars. Download and watch the presentation

Don't have PowerPoint?
[Download a PowerPoint Viewer](#)

Statement of Qualifications Sought for Compact Curtailment Study
The CWCB is soliciting Statement of Qualifications (SOQ's) for conducting a study: 1) to identify issues associated with the administration of state water rights in the Colorado River Basin under the terms of the Colorado River Compact and Upper Colorado River Basin Compact, 2) to develop and evaluate options to avoid, minimize or delay a Compact curtailment of uses if at all possible, and 3) to identify, develop and evaluate (pros and cons) concepts for curtailing water uses in Colorado in the event curtailments are required to comply with Article III of the Colorado River Compact and to implement those curtailments in a manner that will allow the maximum use possible of Colorado's entitlements under the terms in the Colorado River Compact and Upper Colorado River Basin Compact and do so as equitably as possible. [More Info...](#)

Draft Technical Analysis Reports Available
One of CWCB's roles in the Interbasin Compact Process is to support the on-going implementation of the Water for the 21st Century Act. In this capacity the CWCB worked with the Board, the Interbasin Compact Committee (IBCC), and the Basin Roundtables on several technical analyses. [Read more and download reports...](#)

Colorado River Water Availability Study
The CWCB is conducting a Colorado River Water Availability Study to help Colorado make wise resource management decisions. The study is intended to answer what on the face seems an easy question: "How much water from the Colorado River Basin System is available to meet Colorado's current and future water needs?" [Read more ...](#)

Chatfield Reservoir Reallocation Project
The CWCB is working with the U.S. Army Corps of Engineers and a coalition of local interests to investigate the conversion of existing storage space in the reservoir for joint-use water supply purposes. [Read more...](#)

Figure 1: Current CWCB Home Page

Internal Page Structure

The internal pages are well organized and allow the user to find most related information without difficulty. A lot of this existing structure can be used in the new site and will help lend some familiarity to visitors when the site is implemented.

One issue that arises is when two CWCB sections overlap, where the common data is not always available in each section. For example, numerous sections have information about grants, which cause this information to be spread throughout the website.

The landing pages, pages accessed through the links or menus, are currently being used for static text in many cases. Current and pertinent information is not prevalent in these pages. Furthermore, headers are not used on every page.

A positive in the existing site is the use of feedback links. Most of the pages provide links to the appropriate contact, which is very beneficial to the user of the site.

Lastly, very few of the existing pages with statistical or factual information have “Last Updated” dates shown. Users find “Last Updated” dates useful, so they can gauge the whether the information on a page is current.

Applications

Calendar Applications

The calendar applications should be ported to at least .NET 2.0, which can be supported by Microsoft Visual Studio 2008.

Laserfiche Applications

The Laserfiche applications should be ported to the latest Laserfiche API and .NET 2.0.

Fonts CSS and Colors

The fonts used throughout the site are 'Tahoma', 'Verdana', 'Arial', 'Helvetica' and 'Sans-serif' which are all web safe. The Tahoma font is very readable on web pages. The font color used for the body text is 3d3d3d, which is a dark grey. This color is not web safe but should not be a problem to reproduce in all modern browsers.

The current website has a large number of very similar colors being used. The colors are primarily blue and earth tones. The colors are complimentary and are darker tones. Graphics are used throughout the site in content and as link items.

The site makes limited use of graphic backgrounds or no gradients in any of the menu's backgrounds or page layouts.

Navigation

Navigation is consistent throughout the site, which makes the site easy to navigate. Breadcrumbs are used throughout the site to help with navigation. The home menu link is available on all pages and is easy to locate.

Links

The links throughout the site seem well maintained; broken links are not an issue.

Accountability

Contact us links are available on all pages, on the top header link menu and footer link menu. Contact links for specific individuals are provided in most parts of the site. This is very beneficial to the user and helps to get questions to the correct staff member.

Dates of Updates

There are few pages that track the date they were created or updated. Meeting-related pages are currently maintained this way. Overall, a good policy is to date any factual or date-sensitive information that is maintained on the website.

Recommendations

Overview

The current website is developed with Microsoft Content Management Server (MCMS). This system is currently scheduled to be replaced by Microsoft Office SharePoint Services 2007 (MOSS) and will be updated to SharePoint 2010 in the upcoming year. The rule of thumb with Microsoft products is that applications should not be more than one generation behind, as Microsoft normally only provides a conversion or migration to the next version. Regarding the current CWCB website, there are many reasons and benefits for migrating to the MOSS 2007 platform. MOSS has matured significantly from the MCMS days and now fully utilizes the .NET framework and readily integrates with the Microsoft Office 2007 family of products.

The current website has been put together with a lot of thought and many of the techniques currently used can be copied and utilized in the new site.

Things that will be used in the new site are:

1. The calendar with some coding changes.
2. The Laserfiche search.
3. The use of PDF links.
4. The use of "Contact Me" instructions tied to content.
5. The use of breadcrumbs.
6. Some of the page structure that has been created by the CWCB sections.

The website page width is currently 1000px; this width should be maintained in the new website. Website log analytics show that 97% of screens are 1024x768 or greater and that approximately 36% of users are viewing the website at 1024x768.

The following recommendations are also being proposed:

- Center the website in the browser. This is a cosmetic preference, but helps to make the site look more professional.
- Include a 'Last Updated' date for all statistical and factual data that changes or is dependent on time. This will give credibility to the displayed information by letting the users know that the information is timely and current.
- Change the structure from a CWCB section orientation to a category organization, which will divide data and web pages by subject/category. Seven categories have been identified to organize the web pages within the website: Finance, Environment, Water Management, Legal, Technical Resources, Public Information and Boards & Staff.

- On the home page, headers should be used to emphasize keywords for search engines. The home page is a key page for search engines, like Google, and normally will have the highest page ranking in the site. Key words should be highlighted and repeated so that the home page can achieve the best rankings.
- Change the landing pages, which are the pages accessed through links or menus. These pages are normally second in ranking to the home page and should be used to highlight information that is currently being searched. Using landing pages in this way will help achieve better rankings in most search engines. Static text located on these pages should be formatted as a lead/summary paragraph with a 'Read More' link. The rest of the page should be used to link to pertinent information currently in demand but not shown on the home page.
- Use headers on pages to inform the user of the primary subject and created keywords for search engines. Header text used to attract search engine traffic should be repeated in the content to help search engine rankings.
- Graphics should be used to create a more professional and modern looking site. The site does not use gradients or graphics except for the banner graphic for master pages and menus.

The categories will be displayed and described in the home page section below.

Home Page

The proposed home page is a major change to the existing website. The new layout and organization will be used to facilitate navigation and help direct users to the information they need as quickly as possible (Figure 2).

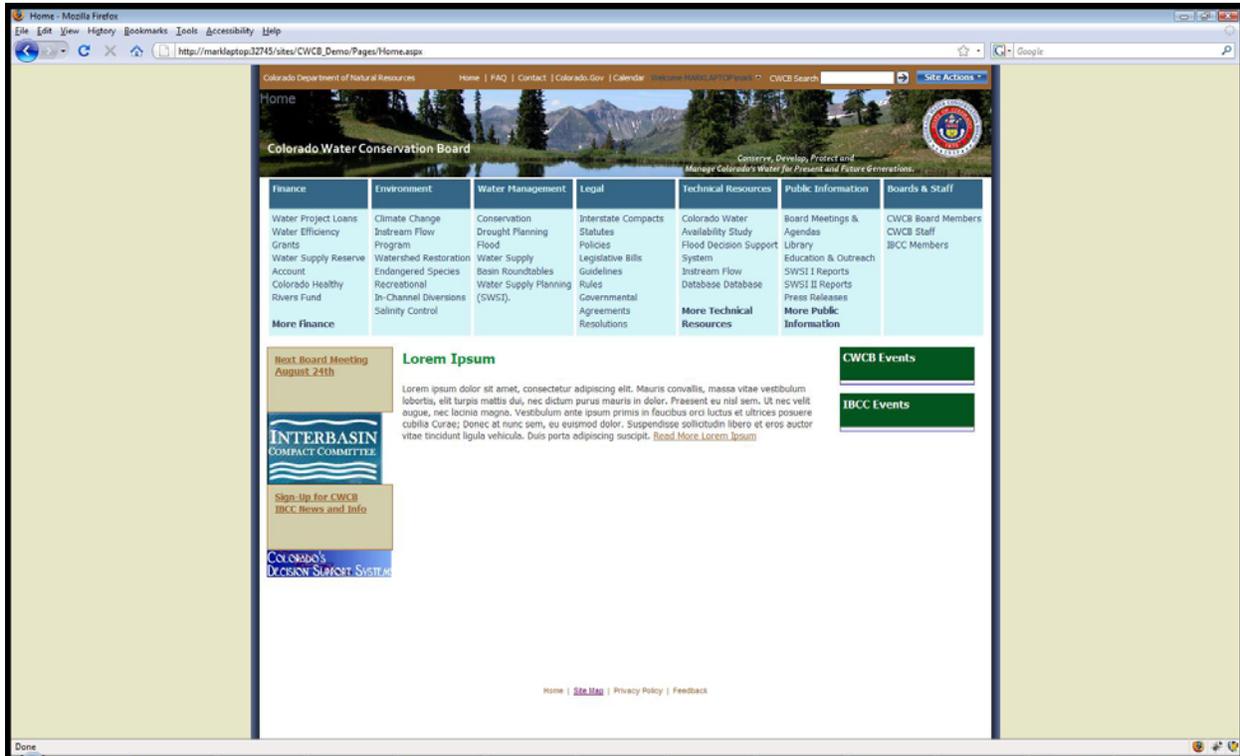


Figure 2: Proposed Home Page

The technique used for the proposed menu exposes the user to a majority of the subjects in the website. The body text on the page will be used for links and images of current importance (i.e. Flood Threat Bulletin in the spring). The navigation will be quicker, more intuitive and expose users to more of the CWCB's program areas, which were previously buried in the website.

Internal Pages

Internal pages will have their own master page and their own menus. Inside pages will have a more conventional menu and will contain breadcrumbs, allowing the user to move backwards along the navigation path (Figure 3).

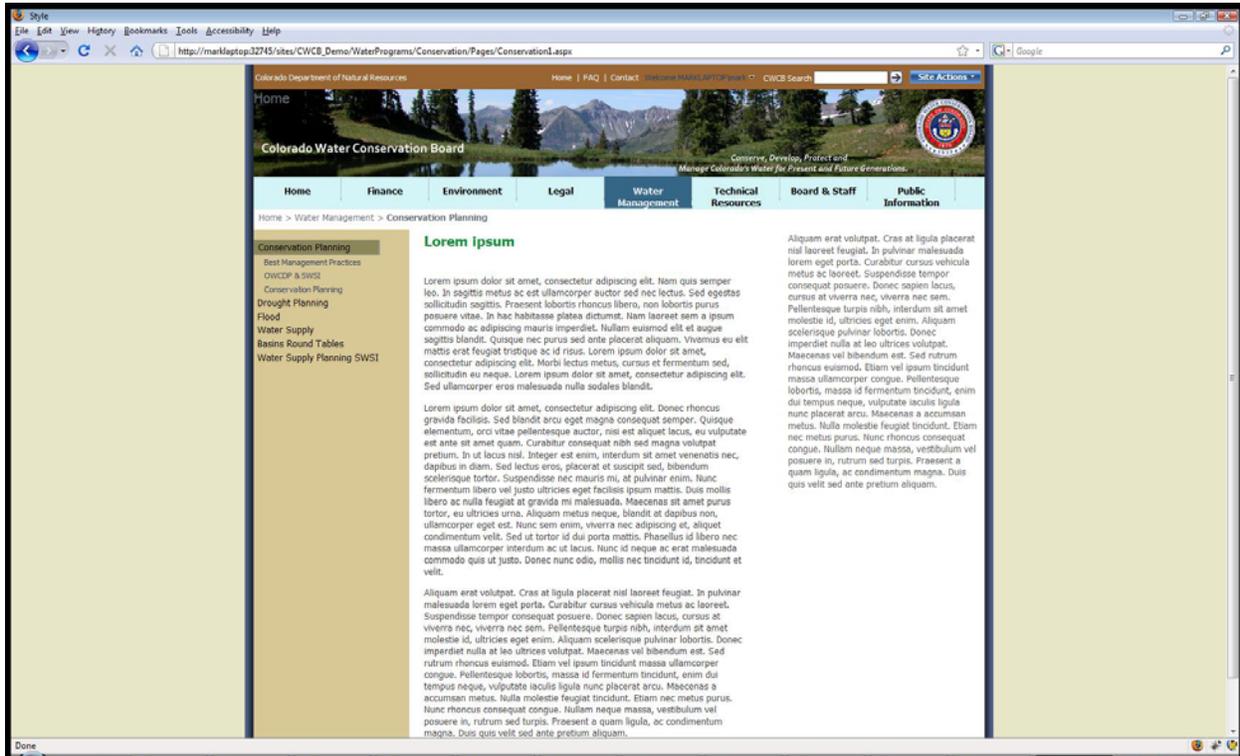


Figure 3: Proposed Internal Page Format

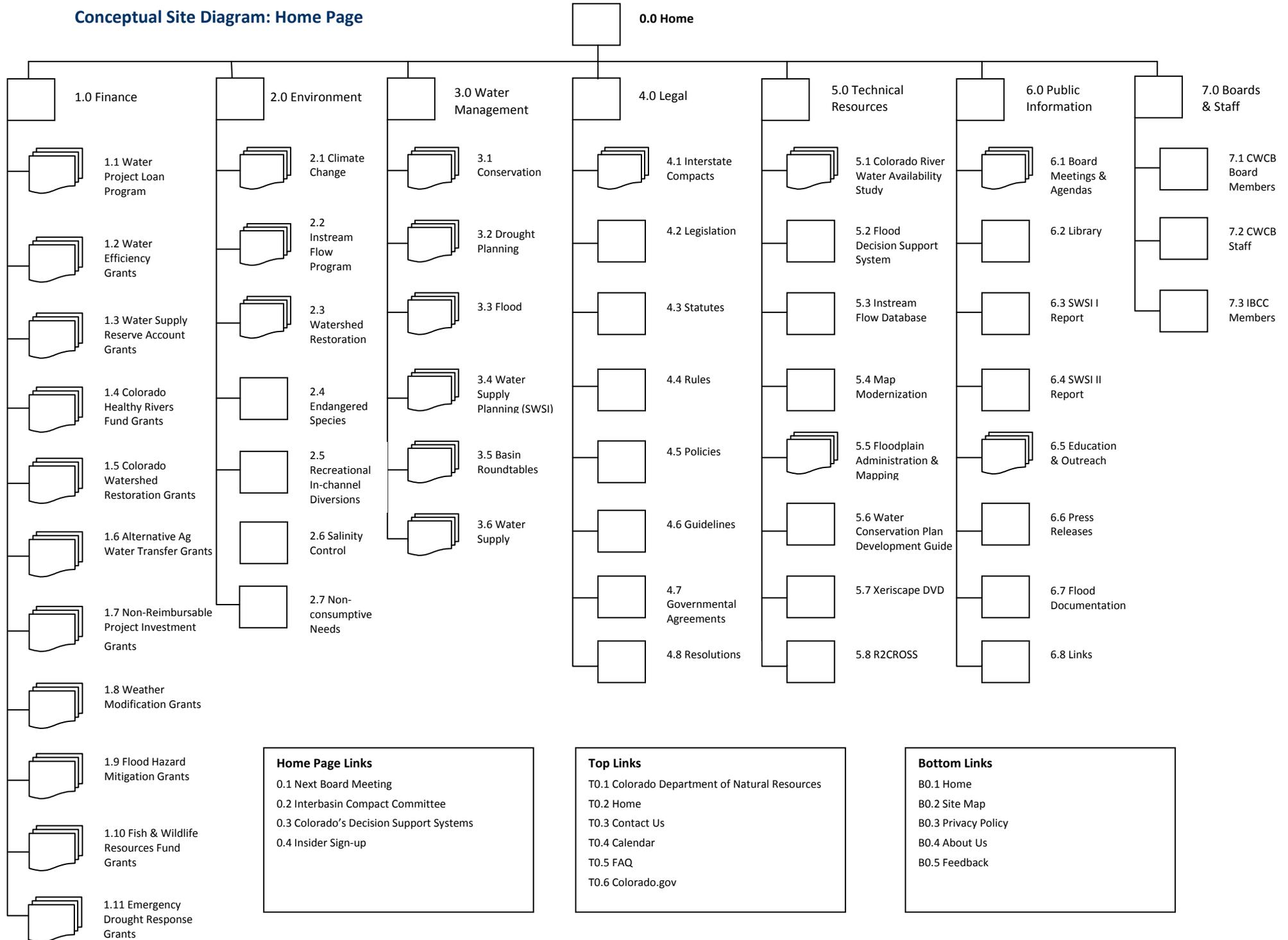
The landing pages containing static or boiler plate data should be shortened and use “Read More” links. The balance of the body on these pages should highlight important information that may or may not be highlighted on the home page of the site.

Proposed CWCB Conceptual Site Diagrams

The following site diagrams and flow charts are intended to provide consistency to, and a starting point for, the organizational structure of the new site. As the site is being transitioned to MOSS, many changes and additions are expected. The overall concept suggests a number of different ways to look at the data and each way should provide a path to all related information.

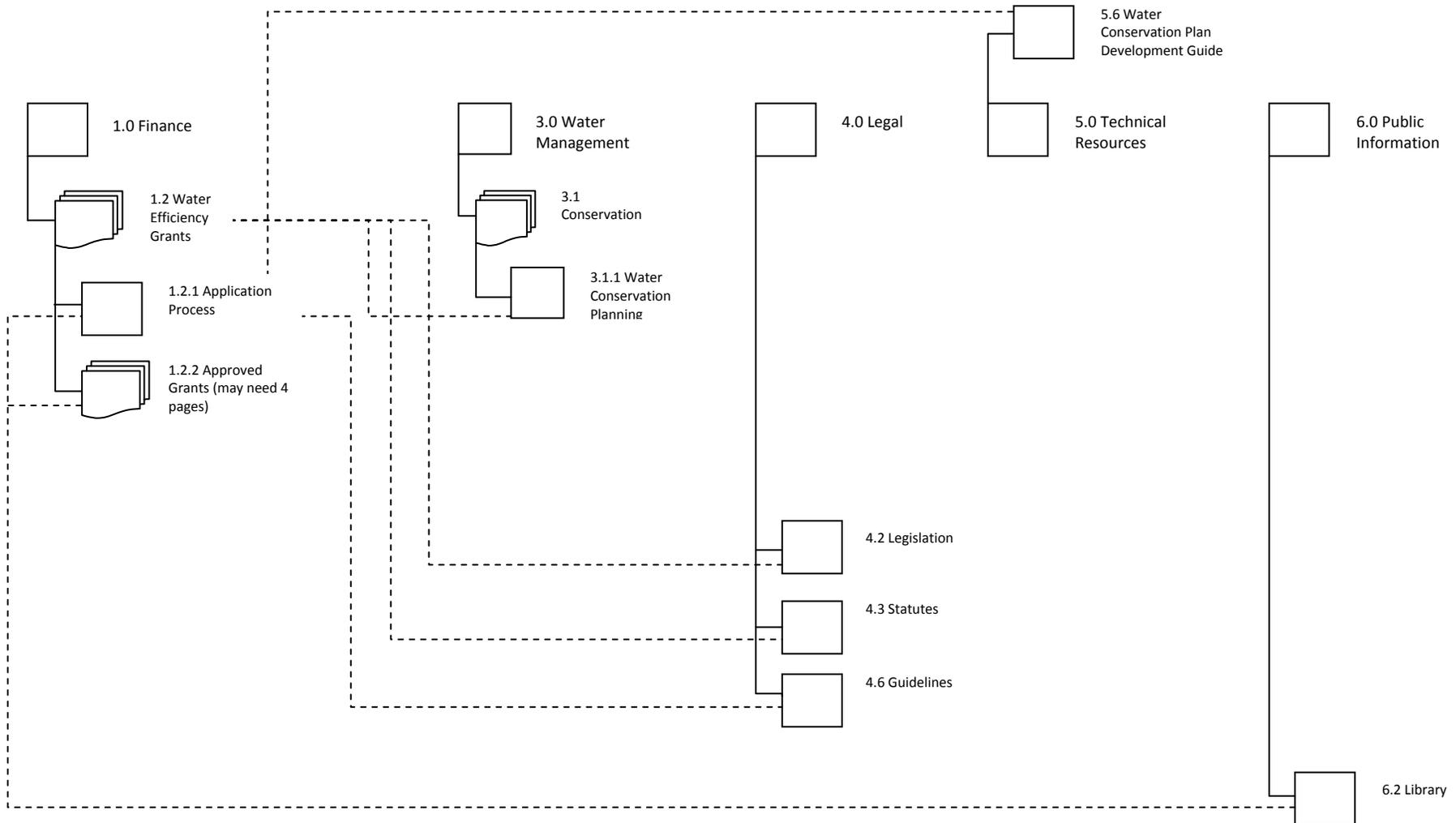
The diagrams are designed as guidelines. Not all specific areas of the website will be depicted in the lower level diagrams. The diagrams are designed as an aid to developing a consistent navigation structure.

Conceptual Site Diagram: Home Page



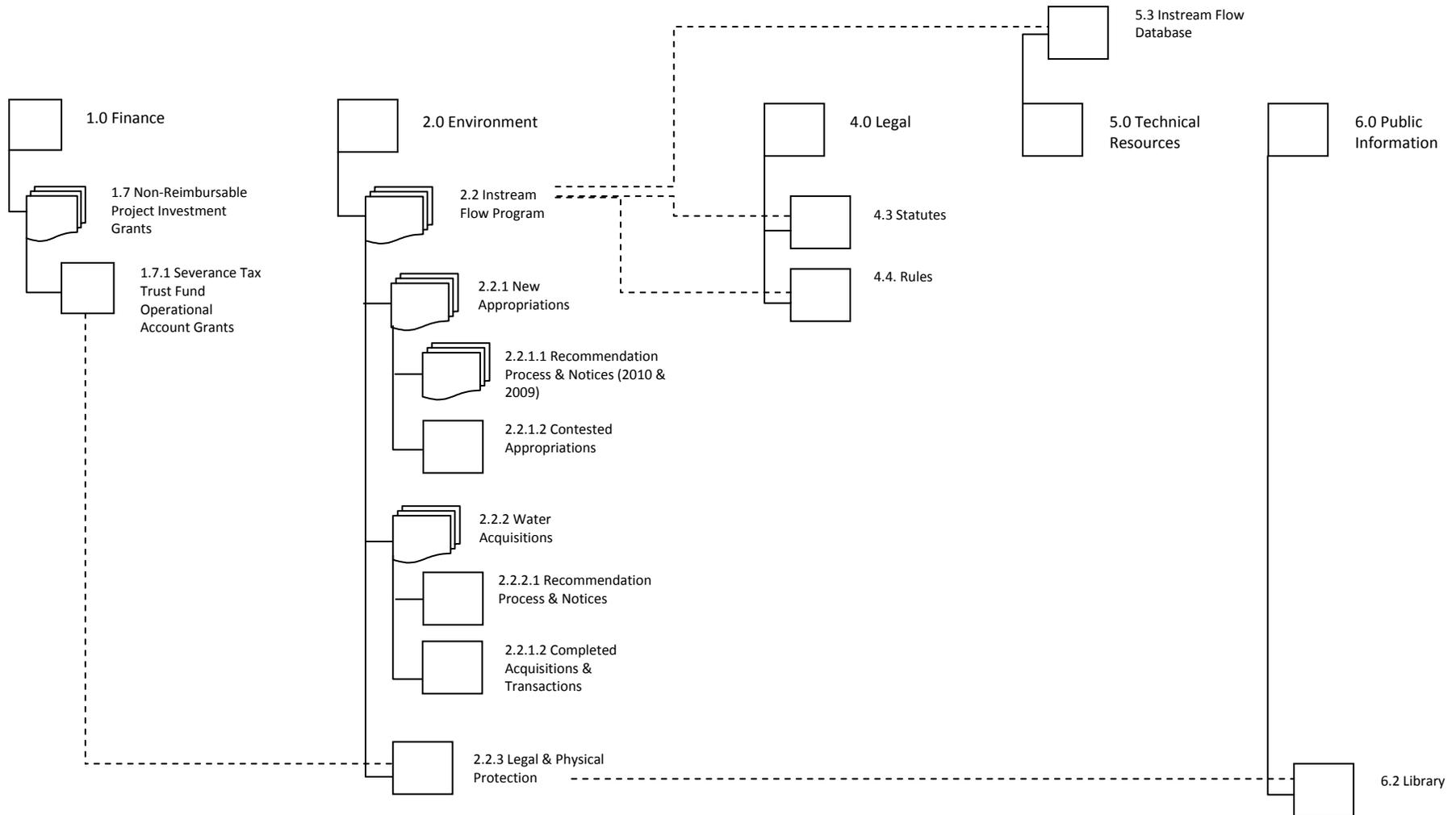
Conceptual Site Diagram: Finance – Water Efficiency Grants

References/Links
to other areas



Conceptual Site Diagram: Environment – Instream Flow Program

References/Links
to other areas



**Conceptual Site Diagram:
Water Management – Basin Roundtables**

References/Links
to other areas

