

Evaluation of Four Design for Community Resilience Projects

What is the Design for Community Resilience (DCR) program?

DCR is a program within the Center for Sustainable Building Research in the College of Design. The goal of DCR is to turn civic challenges into sustainable opportunities. This is done in the pre-design phase by developing goals and design ideas which can later be utilized by architects or consultants.

What is the purpose of this UROP project?

This UROP project seeks to identify ways improve the services of the DCR program while also creating a better understanding of the local needs, strengths, and barriers in implementing sustainable design. It seeks to study the needs of four Minnesotan communities and delivery of the DCR program and its potential gaps. Better understanding the local conditions and their effects on the design process the project seeks to reach conclusions which will further the implementation of sustainable design.

What is the methodology of this project?

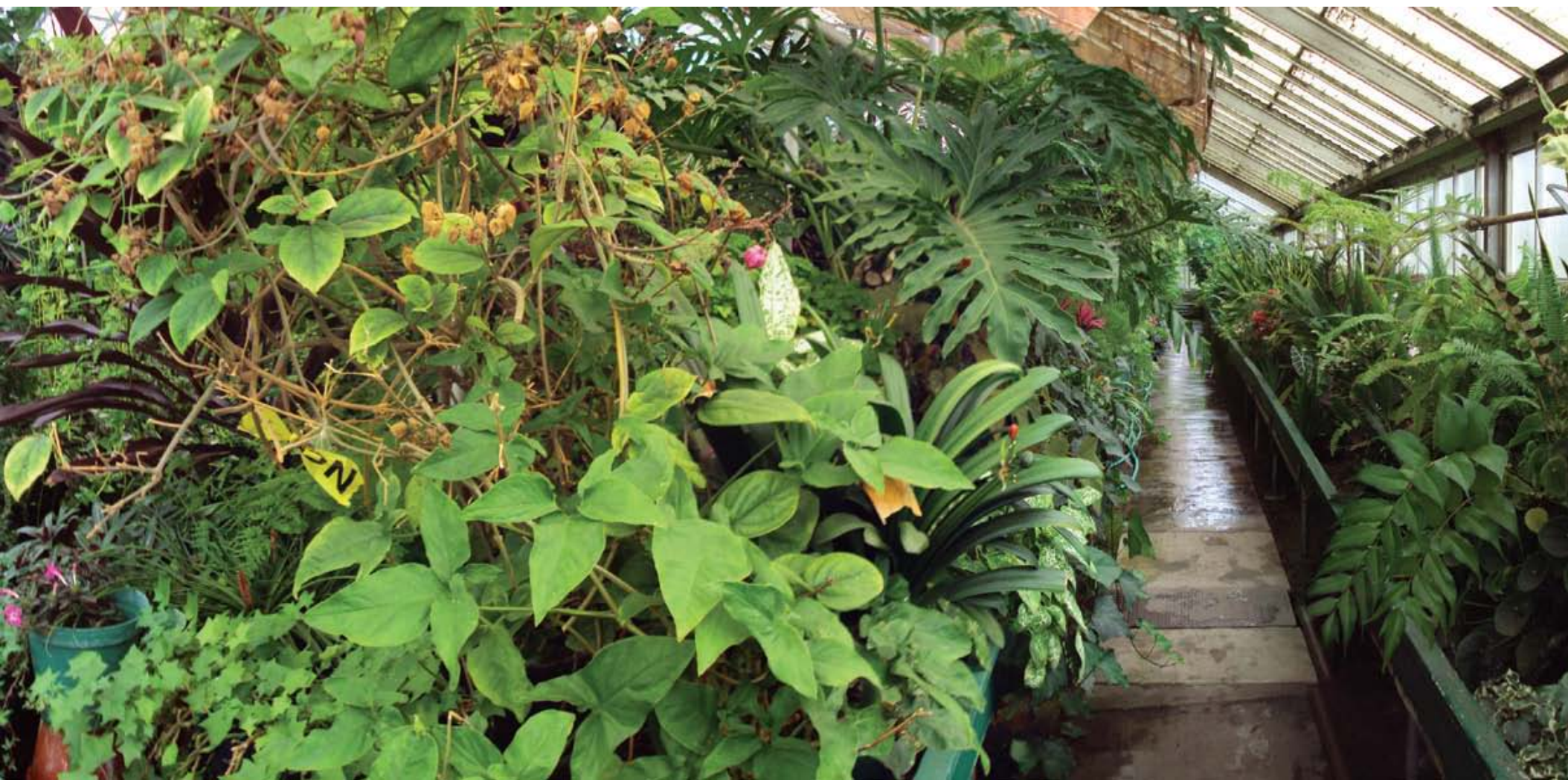
In order to conduct this UROP four past DCR projects were selected. Key individuals who were involved in the development and outcome of the project were chosen. These interviewees included community leaders, staff from the Regional Sustainable Development Partnership, and project partners.

Baudette Railroad Depot



The renovation of this historic depot, currently underway in northern Minnesota, will bring tourists from the fishing resorts into town by creating an art gallery space and railroad museum. The building will attract new groups of tourists such as railroad enthusiasts and art lovers while also creating a focal point for the residents.

Virginia City Greenhouse



The 100 year greenhouse is a large burden to maintain and when the city can barely keep basic services operating an expensive greenhouse causes a problem. In order to preserve the history of the community DCR worked to find solutions so that the utility and staffing costs would be minimal and thus within the budget.

What are the key questions interviewees are asked?

What are the community's economic, social, and environmental sustainability challenges?
 What are the economic, social, and environmental impacts of this project?
 Overall, what impact did DCR's work have on your community?
 How was the final document DCR produced used by the community?
 What should DCR understand about your community before beginning their work?
 Is sustainability a major goal of your community?
 What can local and state governments do to help your community live sustainably?
 How might DCR improve its service to communities across Minnesota?

What are some observations based on the project interviews?

Baudette
 Seeking outside help is perceived as a sign of weakness and outsiders, especially specialists, are distrusted. Using interns and students would alleviate this issue since the community is interested in helping students gain real world experience.

Virginia
 The most important ways to encourage sustainability are awareness and funding. Mandated rules or funding with numerous restrictions and red tape puts a damper on community support. However, when carefully argued most people can agree sustainability is a concern and needs to be addressed.

What are some overall conclusions?

Small communities are interested in being sustainable, but the current rhetoric of being "green" has negative connotations in these small towns, thus limiting the discussion of sustainability. Sustainability needs to be differentiated from the market's definition of green. This can be done by showing how design looks holistically at a project so that the project improves the social dynamics without damaging the environment and with an upfront and long term cost within the means of the community.

To accelerate the adoption of sustainable designs DCR should begin each project with a presentation to the entire community about the role DCR will play in the project and then a discussion of what it means to be sustainable. This will clear up some of the confusion surrounding the role of DCR and remove the dichotomous understanding of sustainability, thus generating earlier the support necessary to move the project forward.

What are the next steps in project?

This UROP project will continue to examine two more DCR projects using the same methodology and will then create a final report with recommendations for the DCR program.