

CHAPTER 4:

Revitalization Plan Development-Process

Chapter 4 describes the development process for the Onondaga Creek Conceptual Revitalization Plan (OCRP). Figure 4.1 illustrates the components that make up the OCRP project. Work completed under each component contributed to the final product, the OCRP. Chapter sections correspond to the project components in Figure 4.1.



Figure 4.1 OCRP Project Components



Photos:
Onondaga Creek
Workshops



Photos:
Public involvement
strategies

Technical Information - Process

A compilation of relevant background information concerning the watershed was a logical first step towards the development of the OCRP. Three reports were completed as described in the workplan: a summary document describing the current state of Onondaga Creek, a description of case studies of successful watershed restoration and planning, and the OCRP. The resulting reports are listed in Chapter 5 and contained in the appendices.

The **Onondaga Creek Fact Sheets** describe the current state of Onondaga Creek. The main points from each sheet are reproduced or summarized in Chapters 2 and 3. To produce the fact sheets, Onondaga Environmental Institute (OEI) staff conducted literature searches and compiled relevant information into documents based on topic areas. OEI staff initially developed a broad list of topic areas. These were then reduced based on material found in the literature search and Dr. Richard Smardon's judgment of what the Onondaga Creek Working Group needed to know to develop the plan options, in his role as group facilitator. OEI employees were asked to focus material found in their literature reviews to key findings and implications for creek revitalization.

Once prepared in draft form, the fact sheets were used as an interactive planning tool with the Working Group. The Working Group reviewed and critiqued each sheet in the second half of 2006. Revisions were incorporated into the fact sheets and a revised, formatted set was given to each Working Group member in January 2007 to refer to in the coming months. The Fact Sheets were used by the Working Group to deepen their understanding of existing conditions (reinforcing that learned via field trips and guest speakers) and to develop options for the revitalization plan.

The **Case Studies Guide: Conceptual Alternatives to Onondaga Creek** was developed to provide the community and decision makers with various examples of stream revitalization throughout the country. Each river is unique; no single example will provide a perfect reference with which to guide local restoration (Williams et al. 1997). However, by examining many projects, answers to local questions can be gleaned

from the solutions of others (Riley 1998).¹

For the **Case Studies Guide**, OEI staff researched and produced the document; Atlantic States Legal Foundation reviewed drafts of the text. Three cases were closely examined: South Platte River in Colorado, the Guadalupe River in California, and the Bronx River in New York. Each case describes river history, current projects and draws lessons for Onondaga Creek revitalization. Twelve short cases are presented, emphasizing one or two salient revitalization examples with web-site links for further exploration. At the end of the document, a resource section provides websites of additional cases organized by state.

Finally, the **Onondaga Creek Conceptual Revitalization Plan** document was produced. The process to create this document is described in the last section of this chapter.

Public Education - Process

Two Project Team members were responsible for conducting public education programs: Cornell Cooperative Extension (CCE) and SUNY College of Environmental Science and Forestry (SUNY ESF). They focused on three types: stewardship-building events, educational presentations and school programs. Canopy, a parks and greenspace advocacy group, complemented the programs with its own event in 2005. All programs were designed to occur before and during the public forum phase of the OCRP and foster public awareness and involvement in Onondaga Creek watershed issues. Adult-oriented programs were also intended to build awareness of and encourage involvement in the plan development process. A table summarizing public education programs conducted for OCRP is in Chapter 5.

Onondaga Creek Fest, sponsored by Canopy, and CCE's Onondaga Creek clean-ups were stewardship-building events.² Based in Kirk Park in the City of Syracuse, these events developed awareness of the creek's location and critical issues.³ The clean-ups called attention to persistent dumping and litter in Onondaga Creek. The Creek Fest was intended to highlight the potential creek revitalization may bring to recreation, community-building, economic development and nature education (Gechas 2005).

Cornell Cooperative Extension held two kinds

¹ A set of well-crafted research questions specifically designed for urban watershed management can be found applied to several cases in Platt R. 2006. Urban watershed management: Sustainability, one stream at a time. *Environment*. 48(4):26-42.

² CCE's Onondaga Creek Clean-ups are ongoing annual events, receiving support from the OLP Outreach Committee and other sponsors.

³ Onondaga Creek bisects Kirk Park. However, the creek flows through the park in a deep, cement-lined channel; for safety, chain-link fencing prohibits physical access and visual access is restricted due to vegetation growth around the fence.

of education presentations: guided walks and public lectures. Both required research into the natural, cultural and economic history of Onondaga Creek and were designed to raise awareness about the creek and promote participation in the OCRP (Samuels 2005). Guided walks were conducted in the Valley and Franklin Square areas of Syracuse, both with histories of profound human impact on the creek during the nineteenth and early twentieth centuries. Cornell Cooperative Extension gave a public lecture, entitled **Onondaga Creek: A Glimpse of the Past, Present and Future** to interested community groups. The talks were conducted during the early spring of 2006 to advertise upcoming public forums and raise awareness of groups that may not be inclined to attend forums (Samuels pers. comm.).

For public schools, SUNY ESF, in cooperation with the Centers for Nature Education **Nature in the City** series, conducted a program at Elmwood Elementary School and assisted with the development of an educational pilot program at Blodgett School (K-8), in Syracuse. Cornell Cooperative Extension conducted service-learning projects to develop stewardship of Onondaga Creek for school-age children.

Approximately 80 middle school children participated in the Blodgett School pilot program focused on Onondaga Creek. Twice a week in their science classes, students used Onondaga Creek as a case study to review the relationship between humans and the environment in an urban setting. Ms. Jessica Kauffman, a science teacher at Blodgett, conducted the classes in four-week sessions and helped develop the pilot program by aligning material to state learning standards.

Cornell Cooperative Extension led students from Clary Middle School's after-school program in a service-learning project that complimented the students' on-going study of Onondaga Creek. Cornell Cooperative Extension educators offered a two-part program that included hands-on learning activities about watersheds and the impacts of stormwater runoff on waterways such as Onondaga Creek. The students and their teacher, Ms. Susan Savion, stenciled the stormdrains on West Cheltenham Road with the message "Dump No Waste: Drains to Creek" and distributed informational flyers to nearby residences.

Additionally, students from the Dunbar Center of Syracuse participated in a two-part field trip with CCE to learn about stormwater pollution

and its impact on Onondaga Creek. The first field trip brought students to the Inner Harbor, where they observed the various types of trash that washes downstream. Then the students worked to raise awareness about the street-creek connection by stenciling the stormdrains along Onondaga Creek Boulevard, which runs adjacent to the creek by Kirk Park.

"I learned why its important not to throw my trash down on the ground because it could get right into the water and hurt the fish and other animals."
- Merajah, sixth grader at Clary Middle School

Photos:
Onondaga Creek Festival



Goal and Issue Solicitation - Process

OEI was responsible for compiling stakeholder goals and issues relevant to the revitalization of the Onondaga Creek watershed, under the advisement of the Working Group. The OCRP Project Team devised two methods to gather goals and concerns: *community* forums and *stakeholder* organization meetings. The two types are described below. The goal was to assess the larger watershed community's visions and concerns for Onondaga Creek, which in turn would assist the Working Group in their development of the revitalization plan. Gathering public *input* prior to the development of the plan allowed themes and goals important to the community to be incorporated into the plan (Firehock et al. 2002). Figure 4.2 was used at the community forums and stakeholder organization meetings to explain

what would happen to the input of meeting participants.

There were several rationales for gathering public input prior to plan development. First, developing the OCRP was to be a lengthy process. Few citizens would be able or willing to fully participate in years of meetings for plan development. However, many more people could be reached in one-time meetings in formats designed for larger groups. These meetings served the purpose of developing visions and priorities (Innes and Booher 2004). Second, implementation of the OCRP is voluntary. Voluntary plans need support and involvement of stakeholders throughout the process, both to develop a sense of ownership and to increase the chance of implementation (Scholz et al. 2002, Smolko et al. 2002).

The Project Team refined the format and conducted the community meetings, in order to accomplish the gathering of goals and concerns as stated in the workplan. The Working Group and Project Team brainstormed format and venues for community meetings. Working Group members attended meetings as their schedules allowed.

The Onondaga Creek Community Forums were designed to draw goals and issues from watershed residents and other interested individuals. The meetings were open to the public and marketed as such, through community outreach efforts including: public service announcements; newspaper stories (New Times and The Post Standard); flyer distribution in targeted neighborhoods, via community groups and libraries; "get the word out" kits distributed via email to local organizations (this consisted of a flyer, project information documents and suggested text for newsletters and email notification); community calendars available in the newspaper, television and the web; press releases; and media kits to the local press (samples of these materials are in Appendix H). USEPA's **Getting in Step: A Guide to Watershed Outreach Campaigns** (USEPA 2003a) inspired many of these methods of communication. Several Project Team members visited the editorial board of the local newspaper, presented the project, and requested coverage and support for the project. Project Team members also gave several television and radio interviews in order to publicize the project and the community forums. A communications plan was prepared for the OCRP project in 2005, outlining procedures for communicating with the media and the public (see Appendix H).

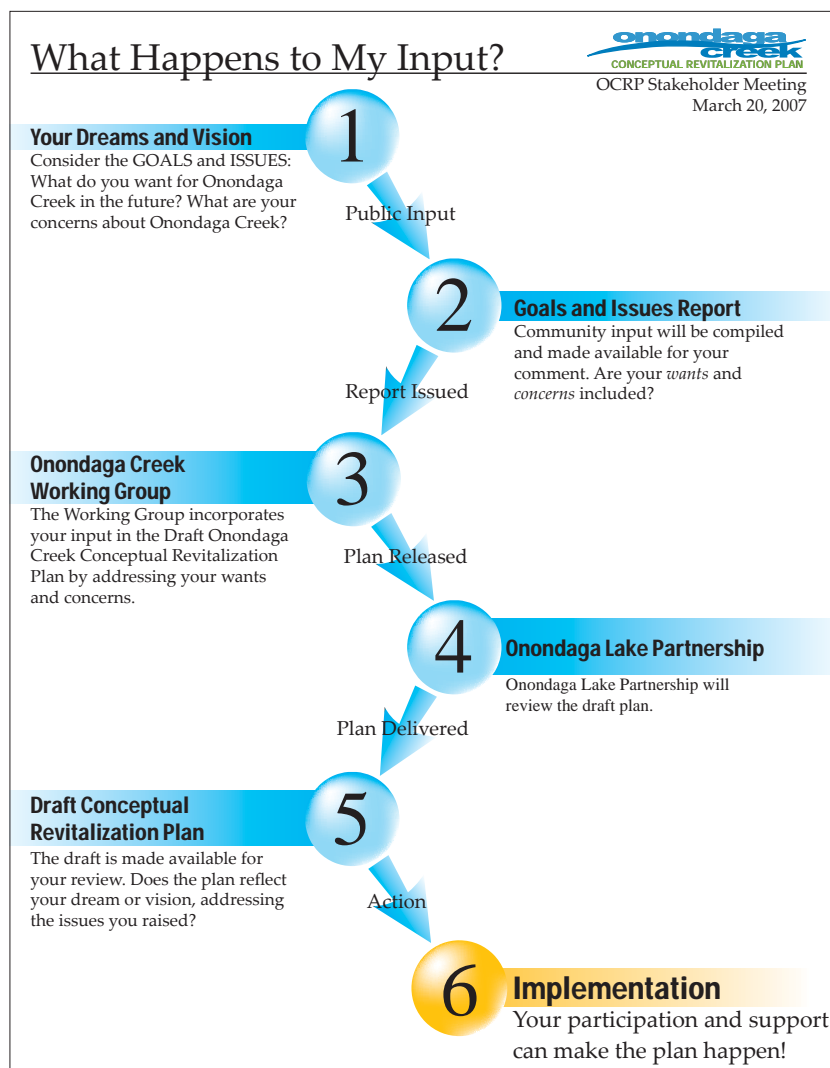


Figure 4.2 "What happens to my input" diagram used for goals & issues meetings

Forum locations were distributed within the watershed geographically and according to population density. However, location choice was constrained by size, configuration, parking, availability of facilities that were perceived as accessible and recognizable to the community, and by the need for facility fees to be within the project budget. Five forums were held in the City of Syracuse, two were outside of the city. Forum locations are mapped in Chapter 5. Three types of input were collected from participants at the forums: dot board results, verbal comments (scribed to flip charts), and written responses (from question cards). Dot board data were entered into Microsoft Excel. OEI staff entered verbatim input collected from the flip charts and question cards into a Microsoft Access database. Verbal and written inputs were based on the open-ended questions in Table 4.1. The Project Team's process and rationale for question development is documented in Appendix F. Forum dates, locations, and tally of written input received are reported in Chapter 5. Appendix G has a summary of dot board procedure and results and a compilation of forum input.

Chapter 5 presents graphs that show topics most frequently mentioned in aggregate for the community forums, obtained from written cards completed by participants at each meeting. The methodology for creating the graphs is briefly summarized as follows. All written input, catalogued according to goals or concerns, was analyzed and assigned a one or two word code, identified as a key word that captured the contextual meaning. Key words were generated based on review of the data, rather than created before-

nization meetings, was intended to draw goals and issues from members of organizations, institutions and businesses, in other words, particular groups that would have an interest in Onondaga Creek revitalization. To determine meeting format and groups to approach, OEI staff gathered advice from several community leaders, in government, non-profit and business roles. A summary of advice is available in Appendix H.

Eight stakeholder organization meetings were held; the majority occurred in the first half of 2007. Six small meetings were distributed among civic and environmental groups with existing meeting schedules. Two large meetings were conducted. The Stakeholder Organization Meeting at the Museum of Science and Technology (MOST) in Armory Square invited over 600 businesses, business interest organizations, religious organizations, academia, and nonprofit and community organizations to contribute their goals and concerns for Onondaga Creek revitalization. About 120 individuals representing over 60 organizations attended. The Onondaga Creek Government Workshop invited elected officials and government agency employees for their revitalization goals and concerns. Marketing efforts followed those of the forums, with the addition of targeted mailings of invitations.

Written responses were the primary type of input collected from participants at the stakeholder meetings. Verbal comments (scribed to flip charts) were collected to the extent practical at each meeting. Treatment of the data followed the same methods described under the Community Forums process. The graphs in Chapter 5 show

Question
<i>What is your goal, vision or dream for the Onondaga Creek corridor? What do you want for Onondaga Creek and its surroundings in the future?</i>
<i>What issues or concerns, problems or obstacles, if any, must be overcome or solved before your vision of Onondaga Creek can be achieved?</i>

Table 4.1 Questions used at Onondaga Creek Community Forums

hand. The input was grouped by key word for each forum and sorted by frequency. Frequencies were aggregated across forums. Input was then graphed by most frequently occurring key word. This process was influenced by methodologies for analyzing qualitative data: content analysis (see for example USEPA 2002) and grounded theory (see for example Silverman 2003, Strauss 1987).

The second type of meeting, the stakeholder orga-

topics most frequently mentioned, in aggregate from the stakeholder meetings, obtained from questionnaires completed by participants at each meeting.

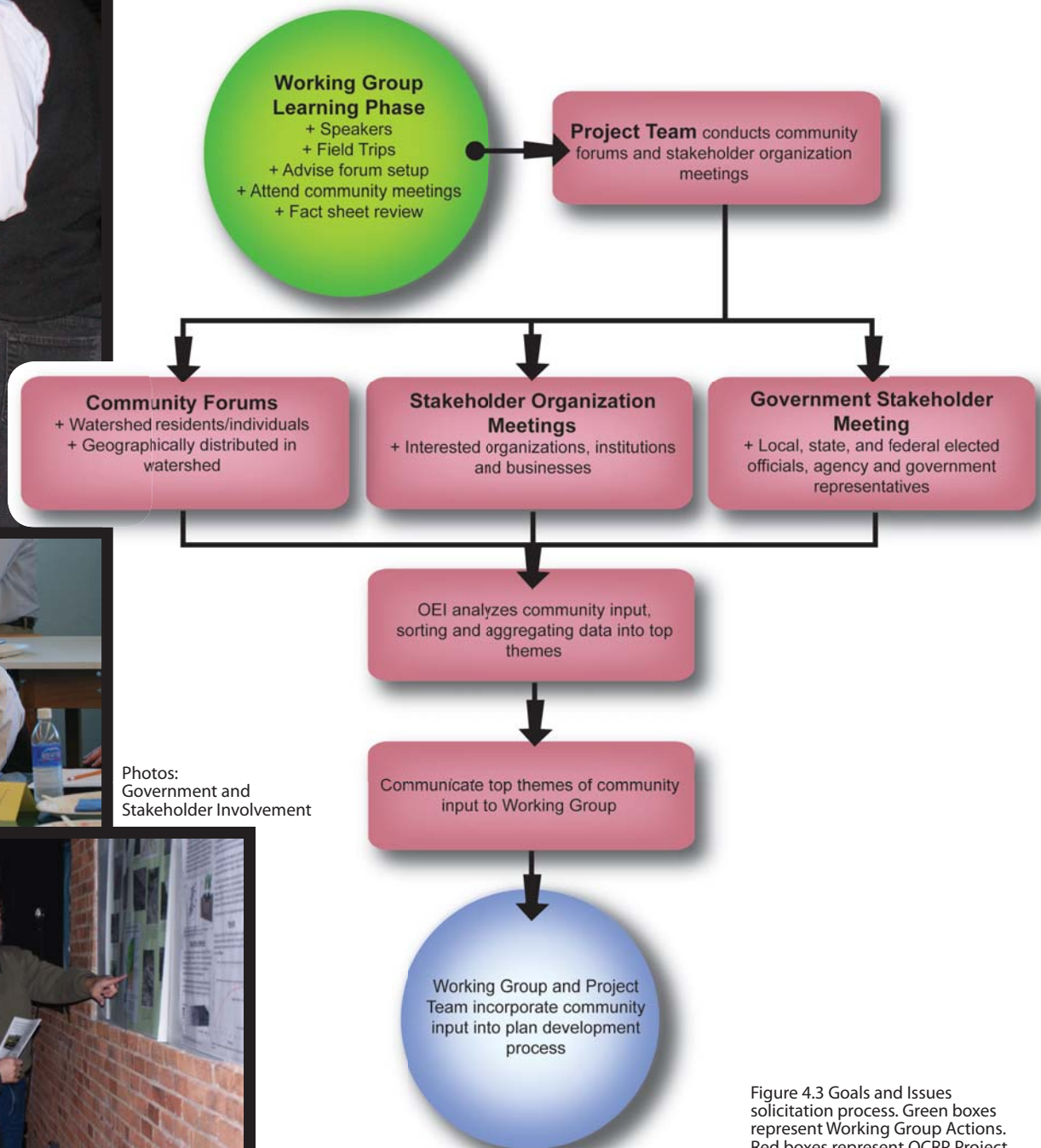
OEI staff communicated to the Working Group the top themes from the Community Forums and the stakeholder organization meetings in fact sheet format (see Appendix G). The Working Group also received copies of Community



Photos:
Community Forums



Forum written input and assisted in categorizing data into themes. The majority of Working Group members gained first-hand experience with community's goals and concerns by attending both types of meetings. Subsequently, the Working Group and Project Team incorporated community input into the plan development process, as described in the next section. Figure 4.3 illustrates the goals and issues solicitation process.



Photos:
Government and
Stakeholder Involvement

Figure 4.3 Goals and Issues solicitation process. Green boxes represent Working Group Actions. Red boxes represent OCRP Project Team actions. Purple boxes represent collaborative results.

Working Group - Process

The Onondaga Creek Working Group has met monthly from February 2005 to the present. To revisit the Working Group's membership and mandate, refer to Chapter 1. Figure 4.4 illustrates the Working Group's conceptual revitalization plan development process and the corresponding Project Team process. Appendices D and F contain Working Group and Project Team meeting minutes. The meeting minutes document extensive detail about forming the Working Group, interaction between the Working Group and scientists and practitioners specializing in Onondaga Creek, and each step of the OCRP development process.⁴

Working Group participants were recruited to represent a variety of interests and geographic areas of the Onondaga Creek watershed. Meetings were held monthly, on the first Wednesday evening of the month. All of the meetings were open to the public. To "advertise" the Onondaga Creek Working Group meetings to the public, several types of monthly notifications were sent: emails to a 300-person list (based on sign-up sheets from the community meetings described above), flyers posted in public libraries in the watershed, and placement of announcements during the week prior to the meeting in The Syracuse Post-Standard's community calendar in the Thursday Neighbors section, the Syracuse.com website, Center for Nature Education's EnviroMails, Onondaga Lake Partnership (OLP) web site and the WRVO on-line community calendar. Informal methods of notification about Working Group meetings were used on occasion, particularly handouts and posters at local environmental events and meetings. SUNY ESF sponsored a website⁵ which served as an additional source of information to the public.

Learning Phase and Plan Components Development

As preparation to development of the revitalization plan components, the Working Group engaged in a learning process about the Onon-

daga Creek watershed; members informed each other as they shared information and experience. Additionally, the Working Group added to their existing knowledge by learning from guest speakers at Working Group meetings, selecting and participating in creek-themed field trips, participating in the goals and issues solicitation process and reviewing the Onondaga Creek Fact Sheets.

After the fact sheet review, the Working Group developed the components of the OCRP. First, the Working Group developed and refined drivers, the driving forces or motivators, for revitalization. Next, revitalization options for Onondaga Creek were developed through a series of meetings devoted to specific topics: hydrology, biology and land use/access/recreation. The Project Team invited local scientists and practitioners as resource experts in each topic area to advise the Working Group during options development. The resource experts included individuals from SUNY ESF, Syracuse University and government agencies. Options are listed in Appendix E. With options complete, the Working Group completed a *design charrette*, a planning exercise where ideas for revitalization were placed on a series of maps over two intense sessions.



⁴ The public participation and river restoration literature describes processes similar to the Onondaga Creek Working Group's process. For especially relevant theory and examples, see Petts 2006, and Smolko et al. 2002.

⁵ The website is accessible at: <http://www.esf.edu/onondagacreek/>. The project logo and website were created by Mr. Bruno Takahashi, SUNY ESF Environmental Studies graduate student.

Photos:
Working Group Design
Charrette



Map Development

To facilitate the Onondaga Creek Working Group's design charrette, OEI created a set of planning maps, 8-10 feet in length, from aerial images of the Onondaga Creek corridor and its tributaries. OEI also developed a set of 40 cards with graphic representations (symbols) of creek revitalization options. The symbol cards were based on options discussed by the Working Group, gleaned from community input, and references on stream restoration practice (Center for Watershed Protection 2004, FISRWG 1998, Kloss et al. 2006, Pinkham 2000, Westchester County 2007). In addition to the symbol cards, the Working Group used blank cards and markers to customize maps. OEI produced a symbols key to aid their use during the charrettes.

The Working Group worked on the maps over two meetings. They split into three teams: urban, rural and "mixed". The urban team placed their ideas on maps of the creek corridor from the Inner Harbor to Ballantyne Avenue. The "mixed" or transitional team placed ideas on two planning maps: Ballantyne Avenue to the northern border of the Onondaga Nation and the Furnace Brook corridor. The rural team covered the remaining segments. Three team facilitators with community design experience were invited to facilitate each team during map making. The resource experts that assisted with options development were invited to return and advise the teams. For the planning map representing the Onondaga Nation territory area, Ms. Jeanne Shenandoah facilitated input from members of the Onondaga Nation. Sticky notes were used instead of the symbol cards.

Map Review and Project Area Development

The large planning maps were then converted into digital representations by OEI. Symbols, notes and additional drawings were reproduced on the digital versions as placed by the Working Group on the original planning maps. Working Group members each received a tabloid-sized set of the planning maps, to verify and review.

The Project Team grouped revitalization map ideas into project areas. The bundles represent future potential project areas for implementation of revitalization projects. OEI developed themes for each project area based on symbol groupings. Working Group reviewed and voted on their preferred potential project areas, results are described in Chapter 5. The revitalization maps in Chapter

5 are the final products, illustrating the Working Group's symbols, bundled into potential project areas.

Goals and Plan Development

One of the last steps for the Working Group was to develop goals for revitalization over a series of meetings. The Working Group clarified their goals by going through the process of developing drivers, options and revitalization maps beforehand (Smardon pers. comm.).

Based on the Working Group's plan components, the Project Team then developed the text for the OCRP. As part of the plan, the Project Team developed specific action items and pilot projects to support the Working Group's goals and to make recommendations for future steps in creek revitalization. The goals and action items are presented in Chapter 5 and the pilot projects are presented in Chapter 9.⁶

The Working Group's last responsibility was to review and make revisions to the conceptual revitalization plan document. As the OCRP must reflect the ideas and intentions of the Working Group; this last step was an important final review before release of the plan for sponsor and public review.



⁶Although the development process is somewhat different, similar plan components are described in Chapter 4 of *Community-based Watershed Management: Lessons from the National Estuary Program* (USEPA, 2005a).

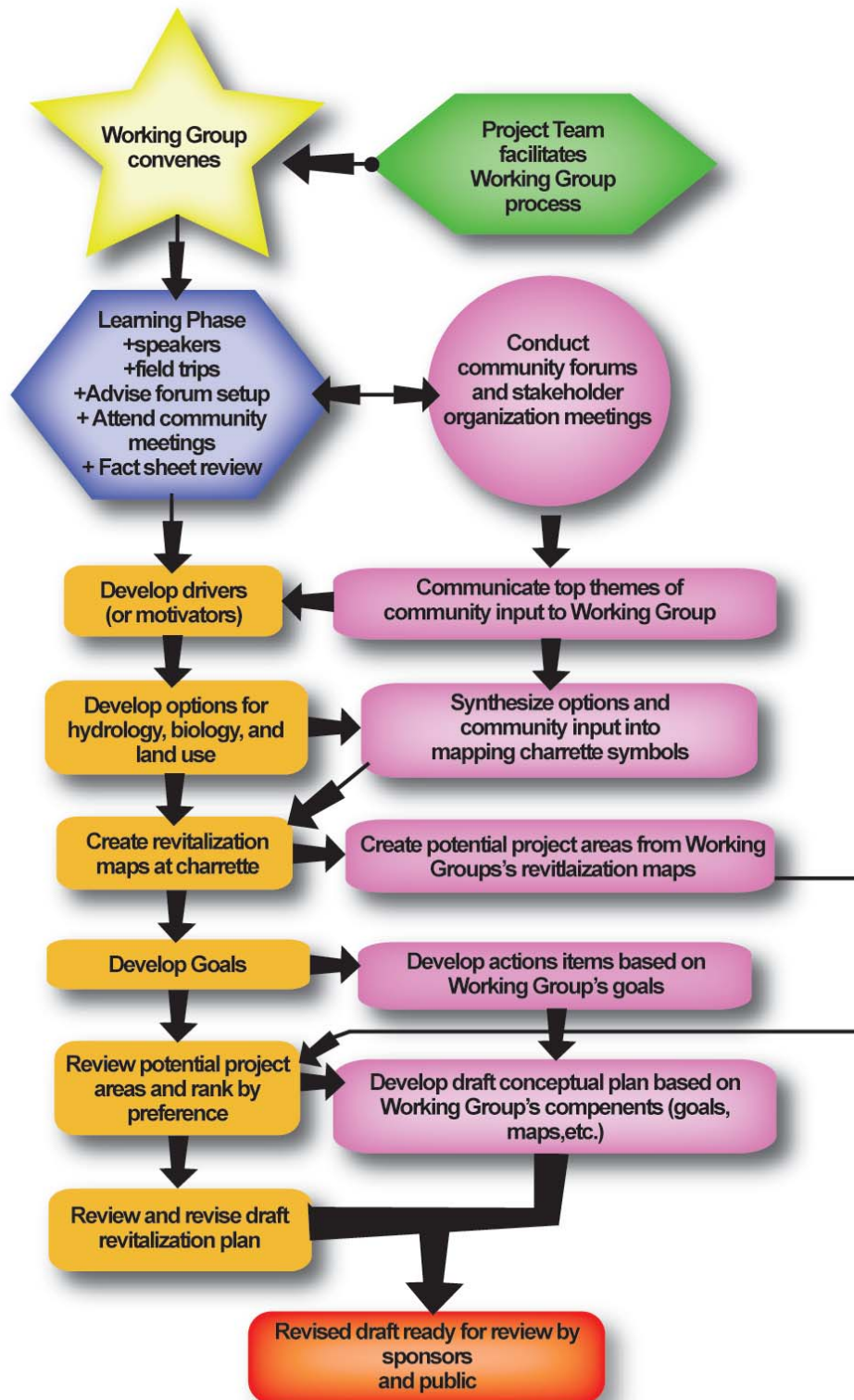


Figure 4.4 The Working Group Process. Blue and gold boxes represent Working Group actions. Green and pink boxes represent OCRP Project Team actions. The red box represents the collaborative product.

