Section 7 PUBLIC PARTICIPATION

7.0 Goals and Objectives

There were several reasons to involve the public in this project. Goals included the expanding the awareness and understanding of the role and function of an estuary in community life in those living in the City of Parksville and surrounding communities; and to encourage public participation in public planning about the future of the estuary and other ecosystem-based issues.

Objectives included:

- Speaking to most residents living within the estuary area about their values around the estuary and any future management, their water use and pesticide use
- Providing information to all residents of the Englishman River estuary regarding estuary function, ecosystem services received from a healthy estuary, and how to enjoy the estuary on a seasonal basis
- Increasing the number of residents participating in conservation projects in the region, and especially the estuary area including observation, photography, recording, mapping, and helping with hands-on management.
- Increasing the number of residents understanding of estuary role and function through workshops, and media coverage.
- Increase the number of members of MVIHES, Arrowsmith Naturalists and other ENGOs in the area and especially those working on the estuary
- Change the behaviour of residents within the estuary to reduce impacts related to introduced and invasive species, recreational and water use, and even habitat enhancement.

7.1 Methods of Public Involvement

Public were involved through a multi-faceted approach including a free workshop, hand-on training sessions, team membership in actual mapping and monitoring, education at community events, media coverage, and a door-to-door encounter which included provision of a brochure, a survey and assistance getting further information.

Estuary Workshop

The project began with a free public workshop regarding estuaries. It was a "beginner" course and advertised as such, clearly stating there was no pressure to volunteer by attending. Topics covered included definition of an estuary, description of some of the ecosystem services that we get, location of the Englishman River Estuary and identification of some of the issues known to exist in the protected area. The audience of almost 30 were also advised about who the various land managers were in different areas of the estuary. They were then introduced to the coordinators of the various elements of the project from MVIHES and Arrowsmith Naturalists, and a quick explanation provided about the different kinds of mapping to be done, and why that approach to mapping was thought to be useful.

Audience members were invited to sign up for volunteer monitoring and to indicate their areas of interest. An afternoon training session was offered regarding use of a GPS. Twenty-five audience members signed up immediately to help out, and almost half returned for the afternoon training session.

Hands-On Training Sessions

Much of the training of volunteers was done as they joined individual mapping and monitoring activities. Due to the straightforward approaches to the mapping and design for the layperson, this was much more efficient and effective. Most volunteers once trained would return to complete further work on the same mapping project and so capacity and effectiveness was increased.

Reliability of information was ensured by coordinators checking operation of any technology as the data collection proceeded. Coordinators also checked that information made sense as it was entered. Follow-up checks on GPS points and related data ensured a high level of accuracy.

Special hands-on training sessions were provided a few times on operating a GPS to give volunteers a chance to ask many questions, and have repeated tries with supervision to ensure a comfort level with the technology. Other special training sessions included water flow monitoring.

Mapping and Monitoring

Ninety-one stewards signed up to volunteer. Given a variety of schedules, 68 were able to participate in the program. They ranged in age, including Middle School students to retired individuals.

Activities for volunteers included mapping estuary vegetation with GPS; photography of plant and marine species and of volunteer activities; eelgrass mapping; forage fish mapping; recording beach seine data on forms; assisting with beach seines by holding nets and safely transporting marine life from nets to buckets and to ocean after identification; shoreline mapping; birding; storm drain marking; pulling broom; assisting with a special Rivers Day event for children; and water flow monitoring.

A total of 286 volunteer hours were contributed to these studies and events.

Community Events

Several community events were attended and/or offered in order to increase the profile of the estuary, this project and its funders. These events included Rivers Day 2007 and 2008, KidsFest 2008, Oceans Day 2007, a Girl Guides storm drain marking event, a guided tour for a special student group from Oceanside Middle School, and a Junior Streamkeepers course. A total of 345 people were contacted through these events.

Door-to-Door, Brochure and Survey

Maps of all the residences within the estuary area were gathered from local and regional governments. Also provided were the maps to show which homes were serviced by city water, sewer, well, and septic system.

A simple survey (see Appendix) was developed to gather information regarding their use of, and value placed on, the estuary to residents, their knowledge of their own water supply, their use of water, water conservation and pesticides, and their willingness to change behavior and/or need of further information.

A brochure was developed to explain the role and function of the estuary to residents, offer a seasonal breakdown of some estuary highlights, and describe some simple actions home-owners can take at home and play to help keep their estuary functioning Each of the 458 homes in the estuary was contacted by Ronda Murdock. Due to project budget, surveys were completed if someone was at home and willing. Where people were not at home, one follow-up visit was made in order to try and contact them again and each home received a brochure.

7.2 Results and Discussion of Public Survey

In order to help open the doors, advertising of Ronda's photo and explanation of the project was done in both local newspapers. Most people contacted were pleased to see Ronda, and happy to know that someone was concerned about the estuary.

Of the 458 homes visited, 218 people were contacted and 215 surveys were completed. The return rate on this survey is 98.6%, and 46.9% of potential respondents were contacted and completed the survey. Most surveys were completed in San Pareil (123 of 215), compared to 69 in Parksville and 23 in Surfside.

Six new volunteers for the monitoring project were found as a result of this door-to-door effort.

Highlights of the results show that the community wishes to protect their estuary, with 98 percent giving the highest rating possible to the need to protect the estuary. Three respondents (1.4%) gave it a medium ranking and 2 respondents, or 0.9%, rated protection as a low priority. One person felt that his property by being developed protected the estuary and that rock walls also protect the estuary.

Water conservation is clearly a priority for the residents in the estuary. Thirty-eight percent (37.6%) have only a low flow toilet, 25.6% have a low flow showerhead only, and an additional 29.3% have both a low flow toilet and a showerhead, showing 92.6% of residents taking action to conserve water.

Also regarding water conservation, 75% take short showers, 54.4% do not water their lawn and 8% do not have a lawn. Seventy-eight percent sweep rather than hose their driveway, while 22% have a powerwasher. Fifty-one percent plant drought resistant native species in their garden. There was some comment that a minimum water charge is unfair and is not an incentive to conserve water.

Fifty-five percent do not use pesticides or herbicides. Regarding amount actually being used in different areas of the estuary it was difficult. In many cases the person being surveyed was not the person in the home that would be responsible for that function. Some felt that they were only using the products in small amounts and so felt that any effect they had was only a minimal negative impact. Others eliminated pesticide use when they began having pets, children/grandchildren around. There was some interest amongst those using pesticides and herbicides for alternatives for additional information and workshops.

Only 6% of residents had never been into the estuary. In all neighbourhoods surveyed, most respondents visited the estuary once a week or more (58.6% overall). The next frequency level was again the same in all neighbourhoods at one time per month (18.6%). Thirteen percent of residents visit the estuary 2-3 times per year, and 3.7% visit once per year.

There was a range of comments on some issues from respondents. These included recognition that the numbers of people in the estuary have increased since pay parking was established in Rathtrevor Provincial Park. Others were concerned about possible inputs to the water system from City of Parksville trucks, car maintenance in Surfside, and vehicle dealerships. Powerwashing of driveways, the roadway and trailers was mentioned by a variety of respondents.

Based on the results of this survey it is clear that the estuary is of real importance to the people who live there. Most who live there spend time in the estuary, and wish to see it protected from further development. The comment regarding rock walls protecting the estuary may indicate a need for further public education about the efficiency of rock walls and their impacts on shorelines , and a look at alternatives.

Caring for the Englishman River Estuary

Though rates of water conservation are good, there is room for improvement. More detailed information about the vulnerability of water within the estuary and the benefits of conservation could be of value.

The runoff from pesticides, herbicides and fertilizers this close to the estuary could be significant to the growth of various aquatic, estuarine and marine plant species, and should be the target of some public education programming. The City of Parksville should consider the passing of a bylaw similar to other municipalities across the country to remove the use of pesticides and herbicides. Alternatives to chemical fertilizers should also be considered for a public education program and research done regarding a potential ban of these chemicals as well.

7.3 Public Participation Conclusions

There is definitely an interest in the community in participating in citizen science, or the stewardship of their ecosystems. By using a variety of methods to contact the community and engage them, a range of resident type and a good number of residents were reached with messaging and/or a chance for a hands-on experience.

- Given the value placed on the estuary by the community, it is important that upcoming OCP reviews consider these values. Bylaws protecting estuary and nearshore areas should be reviewed
- Public education programs regarding the function of their estuary and nearshore and how to care for them should be offered. Topics could include invasive plants and how to remove them, alternatives to seagrasses and algae in the garden as fertilizer, role of the wrack line on the beach, alternatives to hardening, etc.
- Continued opportunities for stewardship and monitoring should be offered. Topics could include alternatives to pesticides, herbicides and fertilizers; continued monitoring of the estuary and nearshore elements of this study such as vegetation, fish distribution, water flow monitoring, etc.

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