This article grew out of a workshop, “Ecology and Planning: A Good Marriage?,” presented by the authors, with the assistance of Sharon Horsburgh of Nanaimo Regional District, at the Planning Institute of British Columbia 2016 Annual Conference - Planning Unfiltered in Kelowna.

Introduction

Planning and ecology certainly interact in a meaningful way. It is the nature of this interaction and whether this interaction can be better understood and managed that has become the subject of increasing interest. Ecology – which comes from the Greek word oikos for ‘home’ or ‘household’ – looks at the distribution of organisms (including humans), their interactions with each other, and their relationship to non-biological environmental processes. Ecology has developed into a field capable of providing the specific information able to inform land use planning. Ecological information has much to offer successful planning.

Planning is fundamentally about shaping communities in a positive direction, looking at the specific uses of land, environmental factors, land economics, and individual and community well-being. Planners are increasingly looking into how to do things better when it comes to the layout and content of our built communities and their natural elements.

Ecological guidelines in the form of what sensitive areas to set aside, how to maintain the health of watershed components and improve green space conditions at least cost are central to the future of local and regional planning. Ecological considerations need not be a barrier to planning as sometimes thought; they are in fact a prerequisite to the sustainable growth, development and quality of human communities.

How the Workshop Unfolded

Our presentation focused on the deficits and obstacles associated with current municipal environmental planning, with available opportunities, supplemented with examples of better/ best practices that potentially point the way forward for municipal and regional planners.

In discussing the current situation in municipal planning in BC, we noted the lack of protection for wetlands and riparian areas, for forests and other key habitats, inadequate acknowledgment of the importance of natural capital/ environmental services, deficient analytical frameworks, and standards inadequately based on science. We further noted that some of the reasons for this situation included: development values tending to trump ecological ones, in part because municipalities do have to address growth and development pressures; organizational silos; lack of adequate staffing and resources for inspection/ enforcement; lack of adequate provincial legislation/ oversight, and a failure by municipalities to make use of all available policy tools.

(continued next page)
Planning and Ecology (cont'd)

Small Group Discussion

After the presentation, we broke participants into roundtables of five to seven in which they were asked to record their perceptions and experiences of the barriers to better municipal environmental planning, opportunities, and better/ best practices.

Barriers:
Participants reinforced the point concerning a lack of leadership at the provincial level, along with policy gaps and confusion between the responsibilities of different jurisdictions. A lack of good data and inadequate incentives for conservation were noted. Policies were seen as too focused on narrow aspects of the natural environment, such as salmon and eagle trees. Moreover, planning is often reactive - in response to specific development applications, rather than providing for more comprehensive protection of ecosystems within local government boundaries.

Insufficient attention to having adequate upland buffers around watercourses was cited, along with protection of non-fish bearing wetlands – of immense value to watersheds and wildlife – and having appropriate setbacks for these. Lack of protection for the forest areas required by songbirds was also an important identified issue. Each approval tends to be done without a comprehensive environmental vision and sufficient, proactive protection of green infrastructure. This is leading to a systematic loss of our most sensitive ecosystems.

Participants saw a limited ecological literacy/ knowledge on the part of planners, politicians, and developers. Further, planners were seen to rely on experts to address specific environmental matters, but quite often these were experts hired by proponents whose ‘objectivity’ is open to question. Resistance to conservation considerations by developers (who can more easily wrap their minds around infrastructure limitations than ecological ones), limited funding for environmental programs, and a ‘by the book’ approach that does the ‘bare minimum’ were mentioned as key challenges.

Opportunities

However, many opportunities exist for local governments to better achieve ecosystem protection and sound management of green infrastructure. Some of the measures noted were use of the Green Bylaws, public or non-profit ownership of key ecosystems, conservation covenants, and tax and density incentives.

Other opportunities noted include retention of conservation professionals/ environmental planning consultants who can help provide the latest scientific rationale for conservation standards. Prioritizing sensitive ecosystems for protection or purchase, and developers being required to set bonds to prevent environmental damage when undertaking development, were additional recommended measures.

Communication was cited as an important aspect, centering on communication with stakeholders, showing the value of nature to developers and others, and expanding on people’s general affinity for water. Building broad alliances of stakeholders, as is being done with the Okanagan Conservation Collaborative Program, with its focus on connectivity corridors, is another key strategy recommended by participants.

Best Practices

Best practices were discussed by participants that centred on monitoring of Environmentally Sensitive Areas through GIS, tracking longer-term environmental trends within municipalities and regions, development of an Environmental Governance Model with water as the driver – for instance, putting more emphasis on watershed planning rather than arbitrary municipal or regional boundaries that do not reflect ecological realities.

Also mentioned were downzoning to protect sensitive areas; integrated, high level, large scale planning (again the Okanagan Conservation Program comes to mind); green infrastructure planning; cost analysis of best management practices over a longer-term time frame; payment of conservation incentives to developers prior to subdivision, and creation of conservation funds for local conservation and restoration measures, as done in the Central Kootenays. In the latter case, voters in the Regional District of Central Kootenay (Areas A, D, and E) around Kootenay Lake chose to support a new local conservation tax that would provide over $1 million dollars over ten years to address clean water, wildlife, and open space.

Use of GreenShore planning for coastal development – such as maintaining shoreline vegetation, avoiding shore armouring and unnecessary ramps and docks; porous pavers enforcement to allow for infiltration, and putting a value on existing and future street trees were also introduced as important practical and smaller scale steps.

Examples of Sound Approaches

Approaches that have worked were highlighted from different jurisdictions. Surrey’s Biodiversity Conservation Strategy; the Islands Trust governance model; the provincial Riparian Areas Regulation; the participation by various stakeholders in the Okanagan Collaborative Conservation Program, and the work of the Nature Trust of BC were all flagged as pioneering...
Planning & Ecology (cont’d)

efforts in sustainable planning practice worthy of emulation. In our presentation, we also looked in greater depth at three case studies: the Town of Gibsons’ Eco-Asset Strategy, the City of Surrey’s Biodiversity Conservation Strategy (BCS), and the Regional of Waterloo’s Environmental Sustainability Strategy. However, space limitation does not permit profiling them here.

Conclusions

These comments suggest a strong appetite for further work to bring available ecological guidelines into the planning realm in a clear, concise and well informed manner. This approach holds significant power to improve environmental sustainability in planning. Clear ecology guidelines, simplified and brought into planning will shift the problem of sensitive ecosystem and species loss into an opportunity to improve municipal environments and better achieve core environmental goals through ecologically informed planning. Policy options available to local government decision makers can be used to implement ecologically based planning guidelines, allowing improved planning practice that builds stronger and more resilient communities.

Christopher Stephens is an environmental consultant with an MSc. In Environmental Management and a Certificate in Local Government Administration. He is currently a Master’s candidate in the Master of Community Planning (MCP) program at Vancouver Island University (VIU). Don Alexander, MCIP, RPP, is a professor in the MCP program and in Geography at VIU.