

Instream Flow Council (IFC) Strategic Plan – 2005-2010

Adopted by IFC Executive Committee - August 5, 2005.

Executive Summary

When the IFC was formed in 1998, its founders articulated the organization’s mission, vision, principles, and overall objectives, as well as the types of services and benefits the organization would provide for its members. This plan builds upon that initial direction and is intended to be a living document, revised as IFC member needs evolve. Developed over several years, it is based on a survey of the membership, considerable discussion by the Executive Committee and membership, and Executive Committee feedback on resulting drafts. Its purpose is to describe what IFC is, why it exists, what it believes, the challenges and opportunities it faces, what it wants to accomplish and represent in the long term, and how it intends to get there. In addition to setting a broad direction for IFC, this plan establishes measures of success and specific strategies to achieve its goals. The highest priority strategies are included in the plan, while the appendix includes others that IFC feels are important and may implement as opportunities arise. This plan looks ahead 20 years, but most strategies are focused on the next five. It is unlikely that IFC will be able to accomplish every strategy included in this plan. To implement, evaluate, and refine this strategic plan, IFC will do the following: the Executive Committee will prepare annual work plans that identify the specific actions IFC will strive to complete that year; the President will prepare a report of IFC accomplishments at the end of his/her two-year term in office; and the plan will be reviewed and updated every two years.

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Introduction

The Instream Flow Council (IFC) is an organization of state (U.S.) and provincial/territorial (Canada) agencies with public trust responsibilities for fish and wildlife management. Membership in the IFC is limited to state and provincial fish and wildlife management agencies. Each member agency has a voting representative. Collectively, these members form IFC's Governing Council. The U.S. and Canada are divided into five IFC regions, each with an elected Regional Director. The Regional Directors, elected IFC national officers, past IFC President, and two ex-officio members form the IFC's Executive Committee.

IFC members are typically those employees in a leadership position related to their agency's instream flow program. State/Provincial instream flow programs typically include: determining and reporting instream flow status, setting instream program goals and objectives, quantifying instream flow needs, and working to achieve program goals.

Mission and Vision: The mission of the IFC is to improve the effectiveness of state and provincial instream flow programs and administrators in protecting, maintaining and restoring aquatic ecosystems. The vision of the IFC is that each stream and river in Canada and the United States would have instream flows that sustain important ecological processes. In furtherance of the IFC vision, each state and provincial fish and wildlife agency must exercise its stewardship and legal obligations to maintain or restore ecosystem values on behalf of its citizens. Over the next 20 years, IFC wants to become a permanent, effective organization that 1) has significantly contributed to the effectiveness of member agency instream flow programs, 2) is a recognized authority and source of information about instream flow science, policy, and administration, and 3) has helped foster and empower an informed citizenry supportive of the need for effective instream flow stewardship.

Values: Conservation of natural stream and river systems is integral to sustaining healthy and abundant fish and wildlife and their uses. Natural stream and river systems provide many added beneficial values and services, including flood mitigation, groundwater recharge, navigation, nutrient transport and recycling, pollution attenuation, water supplies, biological productivity, aesthetic vistas, and recreational opportunities such as fishing, boating, swimming, and wildlife viewing. State and provincial governments have a duty as trustees and stewards to protect these resources, so they can be used and enjoyed by people in perpetuity. The IFC recognizes a need to move toward a commonly accepted ethic that recognizes the need to manage our water resources in a way that respects ecosystem integrity – not just for intrinsic reasons, but because of the societal values these ecosystems provide.

The Need for IFC: Prior to IFC's inception in 1998, state fish and wildlife agencies were polled for their opinions on forming the organization. Respondents expressed the need for several functions. Primary among these was the need for an organization that could assume a policy leadership role on matters dealing with the administration of instream flows and conduct of studies. These founders documented an overwhelming need among state agencies for credible, centralized guidance on proper methods for quantifying instream flows and interpreting results. Although many advances in the field had occurred in the early 1990s, there were considerable differences among practitioners on the proper way to do instream flow studies. Likewise, there was a wide range in the scope and extent of state and provincial instream flow programs. This

need has been addressed in part by completion of the book *Instream Flows for Riverine Resource Stewardship* by fifteen members of the IFC Governing Council and two invited authors. This IFC book is quickly becoming regarded as an industry standard both nationally and internationally.

Having now set the stage for what IFC members should strive for in terms of administrative organization and technical study, the Council's next challenge is to help its members implement the guidelines they have identified in the book. The goals, sub-goals and strategies in this plan flow from the mission and vision articulated above and are designed to guide the IFC through the challenges and opportunities facing the instream flow arena today.

Purpose of this Plan: Why does the IFC need a plan? The short answer is, "to chart our course for the future." More specifically, this strategic plan is intended to:

- ✓ Provide a framework from which to direct our activities.
- ✓ Anticipate coming changes in the instream flow arena.
- ✓ Improve services provided to the membership.
- ✓ Provide measures of success.
- ✓ Provide information to interested parties on IFC's goals and strategies.

The plan sets general direction, as well as identifies specific strategies and activities IFC will strive to undertake in the next five years.

About the Planning Process: The Executive Committee discussed the need to develop a strategic plan during its April 2003 meeting in Iowa. Subsequently, a process to prepare the first IFC strategic plan began. As part of this effort, a survey was sent to the IFC Governing Council members to get their input on several questions pertaining to IFC's future direction and activities. The survey results were used by the Executive Committee in the development of a draft plan. Drafting took place at a January 2004 Executive Committee planning meeting in Nebraska, and via teleconferences and email. Input was sought on the document from all IFC members; it was discussed at the 2004 IFC biennial meeting in New York; and additional comments were sought from non-IFC instream flow experts. In early 2005, IFC's newly-appointed Executive Director facilitated the summary and response to remaining comments for Executive Committee approval. The Strategic Plan will be reviewed and updated at each IFC biennial meeting (even calendar years), and annual work plans will be developed by the Executive Committee that will describe the specific activities that IFC plans to undertake to implement the plan. The IFC president will summarize IFC's accomplishments related to the plan every two years (at the end of his/her term).

Challenges, Trends, and Opportunities Facing Instream Flow Programs

In the future, instream flow and river conservation will become more challenging as water use grows, public awareness of instream flow values increases, climate patterns continue to change, institutional structure and funding of instream flow agencies change, legal systems underlying instream flow law evolve, as science and technology advance, and as all these components interact with each other. This strategic plan attempts to respond to at least some of these challenges and trends in a manner consistent with IFC's mission and resources. In planning ahead, the following challenges and changes are anticipated:

1. Institutional

- a. Funding – Direct funding for fish and wildlife agencies is likely to decline further, while indirect funding (e.g., State Wildlife Grants in the U.S.) is likely to increase and represents an opportunity for maintaining or expanding instream flow programs and protections.
- b. Staffing – Instream flow programs of member states and provinces are typically understaffed and have insufficient interdisciplinary expertise.
- c. Training – Member agencies are sometimes under-trained on instream flow science and administration. The same is true for the water resource agencies (i.e., non-members of IFC) in many states and provinces.
- d. Inter-agency Roles – Instream flow responsibilities are often shared among several state, provincial, and federal agencies, including the water resource agencies which typically have regulatory authority over flow allocation. Also, there is a strong interplay between land management and water management. Many fish and wildlife agencies do not work with, or have the leverage to work with, land use planners.
- e. Management Direction – State and provincial fish and wildlife agencies frequently devote most of their aquatic efforts toward sportfish management while the habitat and water these species need is under-protected, often because many of these agencies have little authority to directly manage water. The importance of nongame fishes is becoming more widely recognized by the public and agencies, but knowledge about the needs of these species can be limited. Also, the U.S. federal government is shifting some of their responsibility for protecting instream flows to the states under the authority of state water laws. The net effect in some cases may be reduced advocacy by the federal government. In Canada, the federal government is responsible for protecting fish habitat, while provinces manage respective fisheries, water, and land. While these mandates overlap, some provinces are abandoning their work related to habitat, assuming the federal government will adequately address their interests.
- f. Policy Direction – Policies can be altered by those in office and can change significantly from one administration to the next.

2. Legal

- a. Many eastern states are modifying their water laws from pure riparian doctrine to a hybrid system that incorporates elements of prior appropriation laws (the result referred to as “regulated riparianism”). This change reflects many elements of western appropriation doctrine by conveying a form of priority date or reservation to water rights or permits. In some cases, water rights are being conveyed through permit processes established for other purposes, such as the regulation of development. The net effect of such change could greatly affect member states’ ability to legally protect adequate amounts of water for instream purposes.

- b. Most western water law evolved under the doctrine of prior appropriation predicated on first-in-time-is-first-in-right diversionary use that conveys a conditional property interest in water. In the 1970s, many western states began to amend water allocation laws to provide for instream appropriations for fish and wildlife. Some states provide opportunities to reserve water in both rivers and lakes. Unfortunately, the majority of water allocation decisions (outside of Alaska) were made prior to laws that provided the ability to protect stream flow. As a result, there is significant over-appropriation of water in many locations, often with few tools to make corrections, even when all parties are in agreement. As human demands for water increase, the prior appropriation system is becoming increasingly at odds with water management to address multiple competing uses, changing values, and water conservation. Federal and treaty rights and reservations under the prior appropriation doctrine may further affect administration of some western water rights.
- c. Many instream flow laws currently in place are not being objectively interpreted, administered, or utilized by state and provincial governments. Monitoring and enforcement are essential to effective instream flow protection, but these activities may not be adequately funded.
- d. The connection between ground water and surface water, though often recognized legally, is frequently ignored, or interpreted to the detriment of riverine resources. Laws on each are often inconsistent or do not allow for effective conjunctive management.
- e. Connections between water quantity and water quality are unrealistically dichotomous. There are many opportunities (e.g., TMDL work) to integrate water quality improvement with water quantity improvement, and these should be capitalized on.

3. Public Involvement

- a. Support – Public support for instream flows varies by jurisdiction and levels of perceived tradeoffs between diversionary and non-diversionary water uses. As water conflicts continue to intensify, instream flow issues will become more political and more in the public eye. Public support is not the same as public involvement; however, the former is needed to stimulate the latter.
- b. Involvement – The general public is becoming more involved in water management issues as demand for consumptive use and flow manipulation increases and natural resources are degraded. This trend was observed in fishery management decisions over the past several decades, and is likely to increase with water management issues in the future. There are limitations to the public becoming truly engaged, since water management issues and legal processes are often carried out in a highly-charged environment. As of this writing, efforts are being made at the federal level in the U.S. to minimize opportunities for the general public to provide input to federal actions such as timber sales and hydro-power permitting that can affect riverine conditions.

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- c. Scope – The public will demand changes in limiting state/provincial laws, in order to recognize more instream uses of water than simply for fisheries (e.g., recreation, environmental flows, etc.). Opportunities will increase for member agencies to direct or coordinate the energy and interest of public groups in productive ways to expand uses of water for instream purposes.

4. Science

- a. Integration – Efforts are needed to demonstrate how to integrate the five riverine components discussed in IFC's book (hydrology, biology, geomorphology, water quality, and connectivity) into instream flow protection. Effort is also needed to appropriately incorporate instream flow science into public policy.
- b. Validation – Studies are needed to demonstrate the effects on ecological processes of flow, watershed, and channel modifications on the five riverine elements identified in the IFC book.
- c. Compliance – Efforts are needed to assure adequate compliance and monitoring of flow regimes required as conditions in water withdrawal permits and hydropower licenses.
- d. Economics and Social Values – Natural rivers are amenities that have economic value, whether adding value to residential property, bringing tourism, or supporting a fishery (or a combination). They provide non-monetary values that can equal or exceed their quantifiable market benefits. Efforts are needed to compile and make available to IFC members information that will support IFC's ecological objectives. IFC members should be able to marshal economic and social value information that reflects a goal of having healthy economies and healthy aquatic environments.
- e. Training – Training is needed in basic instream flow methodologies and related science topics. Training programs that got many IFC members started (i.e., USFWS' Instream Flow Group) are no longer available and many experienced IFC members will be retiring, leaving an experience vacuum in newer program employees. Many training budgets are shrinking, making it more difficult for newcomers to obtain basic information.
- f. There are new instream flow quantification technologies and procedures being developed. IFC has an opportunity to help identify research needs, and help move promising new methods, methodologies, and technologies to implementation.
- g. The IFC is committed to helping its members with technical reviews of instream flow and water management projects, is uniquely suited to do so, and has done so on a limited basis to date. However, anticipated requests for more reviews and reviews of larger projects require resources and commitments beyond IFC's present capabilities.

5. General

- a. Urgency – It is important to protect/reserve sufficient water for instream purposes today as increasing societal demand will increase the difficulty of reserving water in

the future. Some situations offer limited opportunity for improvement, such as in areas where water is administered under a prior appropriation doctrine. However, many opportunities exist today to protect and manage water more effectively that will not afford themselves in the future.

- b. Increasing Conflict – Water use and associated conflicts will increase. Instream flow protection and restoration will become more difficult as demand for consumptive supplies of water increases, and water management for power and other uses grows.
 - i. Water marketing, or the privatization of consumptive water for sale, will increase the tension between public and private water use and public interests associated with instream flow stewardship.
 - ii. In portions of North America where demand for water is high and supplies are limited, opportunities for creative water management are being explored to maximize the uses of water. The focus of these efforts is primarily directed at consumptive uses, but non-consumptive, in-channel uses could benefit if their importance is recognized and promoted.
- c. Drought and Climate Change – Recent dry trends in the West have initiated renewed interest in additional water storage projects, or expansion of existing storage, which will prove challenging to instream flow advocates. And in the long term, evidence continues to mount that human activities are speeding climate change such that effects are now evidenced in lifetimes, not eons. As a result, there is an increasing need for instream flow programs to take climate change into account in their planning, administration, and advocacy for research and policy change.
- d. Growth and Other Population Trends – Most water issues relate in some manner to human needs and the attempt to supply them. Especially in the West, projected forecasts of population growth typically do not consider water supply as a limiting factor. Failure to recognize this fact without accounting for related environmental effects leads to additional demands on already strained (or non-functioning) natural systems.
- e. Unanticipated Challenges – Despite knowledgeable and creative forecasting, there is always the potential for unanticipated challenges. These will complicate the already complex future for instream flow protection and enhancement, and require IFC to maintain flexibility and the ability to quickly strategize and respond to changing member agency needs.

Challenges and Opportunities Facing the Instream Flow Council

- 1. Membership – Membership in the IFC is currently limited to state and provincial fish and wildlife agencies. These agencies are unique in that they are the stewards for their jurisdictions and must address water uses and permitting as they relate to fish and wildlife resources and the public's use of those resources. However, other agencies (e.g., water resource or regulatory agencies, tribal governments, federal fish and wildlife agencies) and groups (e.g., university and government researchers, non-profits, private industry,

and consultants) have valuable instream flow expertise and some have expressed interest in joining the IFC.

There is a need to be more inclusive and still achieve our core mission. We need to continually ensure that our core mission remains on target. Our membership structure serves a legitimate purpose but it may also limit what IFC could achieve in terms of broader cooperation, information sharing and instream resource protection. There may be ways for IFC to retain its current structure and focus on its core mission, while also involving others interested in instream flow, such as by hosting special meetings, workshops, or conferences that are open to a broad audience. The extent and manner of addressing this need may be different over the short- (five years) and long- (ten years or more) term.

2. Resources – As an organization the IFC has limited financial resources to undertake many initiatives. The number of people in the IFC is small and the number of active members is even smaller. We need to find ways to ensure we recruit and maintain qualified members of the Governing Council as existing members retire or move on in their careers. This is a special concern considering that some member agency budgets for instream flow training are limited or inadequate. Though additional IFC staff may offer a solution, that would involve more financial and personnel management responsibilities.
3. Advocacy – While the conduct of each state and provincial instream flow program must originate from within each agency, IFC can play an advocacy role at a broader level. The advocacy role of the IFC needs to be clarified.
4. Not all members have the same level of understanding and expertise in terms of organizational development, legal or institutional enablement, or in fostering effective public involvement. The IFC needs to identify those situations where it can serve its members most effectively, realizing that the effort may be different in each state and province.

The Plan in Detail – Goals and Visions, Sub-Goals, Strategies

For each goal (first level of outline – shaded box), the visions (unshaded box), sub-goals (second level – bold lettering), and strategies (third and fourth level – numbered/lettered) are listed below. The Executive Committee developed a master list of potential strategies, and these are included in the Appendix. Only the higher priority strategies from this list (as determined by the Executive Committee) are included in this section. Strategies listed may help achieve multiple goals, not just the one under which they appear.

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| I. Help state, provincial, and territorial fish and wildlife management agencies establish, maintain, and administer effective programs for quantification, protection, and restoration of instream flows for aquatic resources. |
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Goal I Vision: Member agencies are consistently effective with instream flow programs and proceedings.

20-Year Vision – By 2025, member agencies are successful 85% of in the time in instream flow proceedings in protecting/rehabilitating/restoring public trust aquatic resources.

10-Year Vision – By 2015, 85% of all member agencies have comprehensive instream flow programs.

A. Provide scientific, institutional and legal assistance to IFC members to improve the effectiveness of their instream flow programs.

1. Develop criteria for use of science, public involvement, and legal/institutional components to enable program evaluation and achievement of the above 10-year vision over time. Develop strategies to acquire necessary resources to achieve the vision.
2. Obtain funding and possibly a partnership effort to repeat the National Instream Flow Program Assessment (NIFPA) and develop a survey instrument (possibly similar to the NIFPA survey) that can be used to assess the instream flow programs of the states and provinces. This could serve as a report card for each state/province and could be used to encourage action. The survey would also provide a measure of success.
3. Complete the IFC Technical Assistance Policy (technical assistance to IFC members on program and project reviews).
4. Determine ways to more effectively provide reviews of agency instream flow documents when member requests are made.
5. Continue to provide other technical assistance in response to member requests.

B. Provide or facilitate training opportunities for IFC members related to instream flow science or other aspects of program administration that reflect members' needs.

6. Survey the membership to determine their training needs and desires, evaluate related opportunities, establish training priorities, and arrange for needed and practical member training.

C. Develop partnerships with instream flow stakeholders.

7. Participate at conferences and in other forums relating to water or instream flow management to build relationships and develop collaborative strategies, where appropriate, with those outside IFC.
8. Develop and maintain partnerships where appropriate to help shape future research direction and enhance agency capacity to achieve program goals.
9. Identify instream flow stakeholders on an international, national, regional, and statewide level, develop partnerships and, where appropriate, identify cooperative strategies for instream flow conservation and enhancement.

D. Develop and implement strategies that will help agencies acquire and/or devote additional resources toward instream flow programs, including identification of untapped funding sources.

10. Share project and funding source information and proposals on the IFC internal web site.

E. Encourage increased integration of instream flow considerations into local, state, provincial, and national policy.

11. Encourage and facilitate member involvement in legal and policy forums related to instream flow. Strategies from other sections will also assist in achieving this Goal.

II. Promote sound instream flow science.

Goal II Vision: IFC is a recognized authority on instream flow science.

20-Year Vision – By 2025, IFC is a recognized and frequently consulted authority on instream flow proceedings and science nationally and internationally.

10-Year Vision – By 2015, IFC is recognized as an important partner, promoter and authority on instream flow science.

12. Write and publish topical materials on instream flow science, law, and public involvement. Complete IFC's third book – Case studies of incorporating all riverine components (from IFC's books) into an instream flow needs determination, for both site-specific detailed studies and desktop situations, and addressing adaptive management.

13. Conduct and help others conduct workshops, meetings, and conferences that advance instream flow science, legal tools, and public involvement consistent with information and policies presented in IFC publications.

14. Provide input on projects and reviews of instream flow documents upon request of members and non-members (where appropriate).

15. Develop methods to measure achievement of the vision for Goals II and III.

III. Encourage and facilitate the regular exchange of information among all levels of instream flow scientists, natural resource administrators, and aquatic resource managers.

Goal III Vision: IFC is considered a leading source of instream flow information.

20-Year Vision – By 2025, IFC is an acknowledged source of credible technical information, as well as an authority on policy and public dialogue conducive to instream flow protection and restoration.

10-Year Vision – By 2015, IFC is an acknowledged clearinghouse for credible instream flow technical information.

F. Facilitate the sharing and exchange of information among IFC members.

16. Develop an easily-decipherable summary of each member agency's instream flow policy and programs.
17. Develop, or support development of, a summary document explaining the ecological role of flow in channel formation and maintenance and hydrologic connectivity.
18. Create and maintain an IFC member library of habitat suitability criteria (HSC's).
19. Facilitate the sharing and exchange of information among IFC members by maintaining and using the IFC list server.
20. Facilitate the sharing and exchange of information among IFC members by continuing to hold biennial and regional IFC meetings.
21. Facilitate the sharing and exchange of information among IFC members by encouraging members to develop their own instream flow web sites. Add links to member agency web sites on the IFC web site.
22. Use the list server and web page to serve as a newsletter to improve information sharing.
23. Provide financial travel support to help members attend biennial and regional IFC meetings.

G. Facilitate sharing and exchange of information with other stakeholders.

24. Develop web-based information products based on IFC publications. Post on the IFC website a summary of instream flow studies/reports that reflect the principles identified in IFC publications. Use the website to achieve other Plan objectives as well, including outreach, archiving, facilitating networking, etc.
25. Where appropriate, build coalitions with others who share IFC's vision and goals for instream flow science and management.

IV. **Increase general public awareness and understanding** of instream flow issues and state/provincial stewardship responsibilities so as to stimulate action and support of instream flow protection/restoration.

Goal IV Vision: Member agencies have the majority of their jurisdiction's residents as informed stewards who act politically to support the protection/enhancement/restoration of instream flows for aquatic public trust resources.

20-Year Vision – By 2025, reach 90% of the residents of member agency jurisdictions with information about instream flow science.

10-Year Vision – By 2015, have 80% of all member agencies and NGOs that focus on instream flow issues use IFC materials in instream flow proceedings. Reach 75% of the residents of member agency jurisdictions with information about instream flow science.

5-Year Vision – By 2010, provide IFC-approved materials on the 5 riverine components to 100% of all member agencies and NGOs that focus on instream flow issues.

26. Develop and implement strategies that will maintain and improve the political support for instream flow conservation and restoration.

27. Reconstitute the IFC Outreach Committee and complete a project to examine what outreach materials on instream flows already exist and to suggest how IFC might best fill the need for such materials (including use of various types of media, and including materials for youth). Build upon recent IAFWA outreach review effort and that carried out by Alaska IFC member and staff.

V. **Maintain or improve the effectiveness of IFC's structure and function.**

Goal V Vision: IFC is a viable organization that is effective in assisting members protect and restore public trust aquatic resources. Others seek the counsel of IFC as an authority and valuable partner on instream flow issues. All states, provinces and other jurisdictions eligible for membership are IFC members.

20-Year Vision – By 2025, 100% of all eligible states, provinces and territories of the U.S. and Canada are members of IFC. 100% of eligible states/provinces/territories are represented at IFC biennial and regional meetings. IFC will have assessed the appropriateness of expanding membership eligibility and developing agreements with others, and acted to address these needs. Others seek the counsel of IFC as an authority and valuable partner on instream flow issues.

10-Year Vision – By 2015, 90% of all eligible states, provinces and territories of the U.S. and Canada are members of IFC. IFC has expanded membership eligibility or developed agreements with others, where appropriate. Others seek the counsel of IFC as an authority and valuable partner on instream flow issues.

5-Year Vision – By 2010, 80% of all eligible states, provinces and territories of the U.S. and Canada are members of IFC. IFC periodically receives outside inquiries for its opinion or collaboration on instream flow matters.

28. Evaluate on a biennial basis the effectiveness of IFC's structure and function in order to implement the strategic plan.

29. Develop a written policy defining IFC's advocacy role.

30. Maintain accurate, consistent, and easily-updateable financial, membership, and decision-making records, and make those records available to appropriate entities, as determined by the Executive Committee.

31. Obtain grants from a variety of appropriate sources for IFC projects.