

# **AFS NCD 2011-2015 Strategic Plan Survey Final Report**

**North Central Division  
American Fisheries Society**

**Commissioned by and prepared for:  
2011-2015 NCD Strategic Plan Revision Committee**

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**North Central Division**

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## Synthesis

The American Fisheries Society (AFS) North Central Division (NCD) is updating its strategic plan. To help guide this process, the 2011-2015 Strategic Plan Revision Committee prepared the questions for an online 2011 Strategic Plan Survey, which was then programmed, posted and tabulated for this report by Dr. Dan Witter, DJ Case & Associates.

All current NCD contacts for with email addresses in the database (2,276) were invited to respond to a web survey posted by NCD between 3 March and 5 April, 2011. AFS NCD had 1,452 members of the parent society as of October 2010. Final response was 398 (17%), of which 287 were “submitted” surveys, and 111 were “partial” (surveys partly completed by respondents, but not submitted—these data were retrieved for inclusion in analysis). Seventy-seven percent (77%) of respondents indicated membership in the parent society.

**Transition** was an overarching theme for responses to the *NCD 2011-2015 Strategic Plan* survey, reflecting a time of change on many levels for fisheries in the region.

**Regionally-relevant issues** highlighted by respondents were:

- **Rapid shift in administration from older to younger employees** – Retirement of baby boomers will quickly propel younger staff into positions that require historical knowledge, technical understanding of field techniques and administrative skills. More experienced staff will need to be open to new ideas and flexible approaches while younger staff will benefit from historical knowledge and robust technical skills.
- **Challenging impact of global and landscape-level changes** – Both the profession and society must be prepared to deal with the complex impacts of international trade and economics such as biosecurity, invasive species, climate change.
- **Increasing demographic diversity** - Greater equity for women is progressing in the profession while still demonstrating a need for improved ethnic diversity and clear recognition of Tribal affiliations and issues. A quarter of the agency staff and nearly one-third of university participants were female. Young professionals (particularly women) tended to be most inclined to parent society membership.

**Objectives** identified by respondents that may address these issues:

- **Deliver unbiased authoritative scientific information to decision-makers**
  - Largely leave political advocacy to other organizations.
  - Support outreach by other entities (governments, nonprofits) that facilitates citizen understanding of and participation in critical fisheries issues.
  - Most positions should be addressed either close to the problem (locally in chapters) or on the national or international scale.
  - Enable staff to participate in development of key regional consensus-based positions outside of constraints in their agencies.

**Provide appropriate and accessible professional development**

- Promote professional development and networking among agency administrators as key aspects of a professional biologist's career.
  - Attend to continuing education needs of mid-career professionals in addition to students.
  - Remove impediments to training (cost and travel restrictions) by using online tools and supporting local courses, particularly at the state level where agencies are unable or unwilling to provide these services.
  - Review both university curricula and continuing education to emphasize field techniques, new technology, global impacts, public outreach, participatory democracy, administration and decision-making skills.
  - Continue an appropriate focus on inclusivity to support women's involvement and improve ethnic diversity.
  - Be more intentional about formally recognizing Tribal affiliations and including Tribal issues.
  - Archive history at an appropriate location (e.g., DC Booth or in state institutions) to properly document history and mentoring to transfer experience-based knowledge to guide future decisions.
  - Encourage the Midwest Fish & Wildlife Conference to shift dates to a time when weather and university finals are less likely to interfere with attendance.
- **Bridge communications**
    - Provide avenues for sharing lessons learned between chapters and student subunits within the Division.
    - Promote interactive opportunities across various levels of AFS, including participation in sections and other fisheries-related organizations for networking among disciplines or for
    - Act as a conduit for information in both directions between chapters, student subunits and the parent society.
    - Partner with other regional organizations with common resource-related goals.
- **Revisit the value of AFS services**
    - Young professionals seem satisfied with the cost of AFS parent society membership, perhaps as a result of significant reductions in membership dues several years ago. In contrast, mid-career state agency staff and retirees indicate that the cost of AFS membership and certification do not match perceived benefits.
    - Modify unit awards to more broadly reward achievements across the Division, rather than repeatedly recognizing the same subunits.
    - Connect members to parent society products such as travel awards and electronic services.
    - Develop a strategic plan that provides vision and some specific direction without being overly prescriptive for units in the Division. Level of specificity may vary with the topic. Include introductory guidance for new members, elected leaders and student subunits with some sample suggestions to jump-start unit ideas and actions.

## Process

The American Fisheries Society (AFS) North Central Division (NCD) is updating its strategic plan. To help guide this process, the 2011-2015 Strategic Plan Revision Committee prepared the questions for the SNAP Survey, which was then programmed, posted and tabulated for this report by Dr. Dan Witter, DJ Case & Associates.

### Members of the Strategic Plan Revision Committee (2011-2015):

Dale Burkett, Michigan  
 Joseph Conroy, Ohio  
 Neil Fisher, Ottawa, Canada  
 Ann Holtrop, Illinois  
 Corrine Higley, Michigan  
 Jim Perry, Minnesota  
 Mark Pyron, Indiana  
 Jeremy Tiemann, Illinois  
 Gwen White, NCD President-Elect

All current NCD contacts for whom email addresses were available (2,276) were invited to respond to a web survey posted by NCD between 3 March and 5 April, 2011.<sup>1</sup>

Members were emailed the first invitation which included an explanation of the survey and the survey link; two reminder emails followed. Final response was 398 (17%), of which 287 were “submitted” surveys, and 111 were “partial” (surveys partly completed by respondents, but not submitted—these data were retrieved for inclusion in analysis).

AFS NCD has 1,452 members of the parent society as of October 2010. Seventy-seven percent (77%) of respondents indicated membership in the parent society.

The sample was purposive and voluntary; exactly the intent of NCD, which was to allow AFS members with interest and inclination enough to express themselves about the NCD strategic plan including all activities of the NCD.

The survey was created in SNAP software, and data were exported from SNAP into SPSS 19 for analysis. See Appendix A (Questionnaire, p. 21) for exact question wording and order. Rounding sometimes results in totals other than 100% (e.g., 99%, 101%). Frequency analysis of all variables (including all respondents, original response categories, missing values) is provided in Appendix B, p. 29.

## Results

Half of respondents (50%) were affiliated with state/provincial agencies, 24% with universities, and 12% with federal agencies (Table 1). Most respondents (77%) were

<sup>1</sup> NCD asked AFS State Chapters in the Division to forward the survey link to their members who are not also Parent Society members; not all Chapters did so.

members of the AFS parent society, 24% were female, and respondents were roughly divided between those 44 years and younger, and those 45 years and older.

Table 1. AFS-NCD respondent characteristics.

Your primary employment affiliation (please click one)?	Federal agency	12%
	Non-government organization	2%
	Private business	8%
	State/Provincial agency	50%
	University	24%
	Other	4%
	Total	302
Are you a member of the AFS Parent Society:	Yes	77%
	No	21%
	Don't know	2%
	Total	301
Are you:	Female	24%
	Male	76%
	Total	299
Please indicate your age:	24 or under	3%
	25-44	52%
	45-64	42%
	65 or over	3%
	Total	301

Respondent characteristics were cross-tabulated (Tables 2, 3, and 4).

Table 2. AFS-NCD survey respondents' characteristics by primary employment affiliation.

Characteristic		Your primary employment affiliation (please click one)?						
		Federal agency	Non-government organization	Private business	State/Provincial agency	University	Other	Total
Are you a member of the AFS Parent Society:	Yes	78%	80%	83%	70%	90%	73%	77%
	No	19%	20%	13%	30%	8%	18%	21%
	Don't know	3%	0%	4%	1%	1%	9%	2%
	Total	37	5	24	151	73	11	301
Are you:	Female	24%	20%	13%	23%	31%	27%	24%
	Male	76%	80%	88%	77%	69%	73%	76%
	Total	37	5	24	150	72	11	299
Please indicate your age:	24 or under	3%	0%	0%	0%	11%	9%	3%
	25-44	44%	60%	46%	50%	63%	45%	52%
	45-64	50%	40%	54%	48%	21%	36%	41%
	65 or over	3%	0%	0%	2%	5%	9%	3%
	Total	36	5	24	151	73	11	300

Table 3. AFS-NCD survey respondents' characteristics by AFS parent society membership.

Characteristic		Are you a member of the AFS Parent Society:			
		Yes	No	Don't know	Total
Your primary employment affiliation (please click one)?	Federal agency	13%	11%	20%	12%
	Non-government organization	2%	2%	0%	2%
	Private business	9%	5%	20%	8%
	State/Provincial agency	45%	70%	20%	50%
	University	28%	9%	20%	24%
	Other	3%	3%	20%	4%
	Total	232	64	5	301
Are you:	Female	23%	30%	20%	24%
	Male	77%	70%	80%	76%
	Total	230	64	5	299
Please indicate your age:	24 or under	3%	3%	20%	3%
	25-44	51%	57%	60%	52%
	45-64	42%	40%	20%	41%
	65 or over	4%	0%	0%	3%
	Total	232	63	5	300

Table 4. AFS-NCD survey respondents' characteristics by gender.

Characteristic		Are you:		
		Female	Male	Total
Your primary employment affiliation (please click one)?	Federal agency	13%	12%	12%
	Non-government organization	1%	2%	2%
	Private business	4%	9%	8%
	State/Provincial agency	47%	51%	50%
	University	31%	22%	24%
	Other	4%	4%	4%
	Total	72	227	299
Are you a member of the AFS Parent Society:	Yes	72%	78%	77%
	No	26%	20%	21%
	Don't know	1%	2%	2%
	Total	72	227	299
Please indicate your age:	24 or under	4%	3%	3%
	25-44	63%	49%	52%
	45-64	33%	44%	42%
	65 or over	0%	4%	3%
	Total	72	226	298

Table 5. AFS-NCD survey respondents' characteristics by age.

Characteristic		Please indicate your age:				
		24 or under	25-44	45-64	65 or over	Total
Your primary employment affiliation (please click one)?	Federal agency	10%	10%	15%	11%	12%
	Non-government organization	0%	2%	2%	0%	2%
	Private business	0%	7%	10%	0%	8%
	State/Provincial agency	0%	48%	58%	33%	50%
	University	80%	29%	12%	44%	24%
	Other	10%	3%	3%	11%	4%
	Total	10	157	124	9	300
Are you a member of the AFS Parent Society:	Yes	70%	75%	79%	100%	77%
	No	20%	23%	20%	0%	21%
	Don't know	10%	2%	1%	0%	2%
	Total	10	157	124	9	300
Are you:	Female	30%	29%	19%	0%	24%
	Male	70%	71%	81%	100%	76%
	Total	10	155	124	9	298

Respondents were presented a series of potential roles for AFS-NCD, and asked to evaluate the importance of each role (Tables 6 and 7).

Table 6. "How important is each of the following possible roles for the American Fisheries Society (AFS) North Central Division (NCD)?"

How important?	High importance	Moderate importance	Low importance	No importance	Don't know	Total
a. Political advocacy	27%	49%	18%	3%	3%	361
b. Information source	63%	31%	4%	1%	1%	360
c. Professional development	59%	33%	6%	1%	1%	359
d. Development of position papers	27%	49%	19%	1%	3%	359
e. Division leadership	28%	48%	14%	2%	8%	355

Table 7. "How important is each of the following possible roles for the American Fisheries Society (AFS) North Central Division (NCD)?" Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest) where 1="High importance," 2="Moderate importance," 3="Low importance," 4="No importance" ("Don't know" eliminated for purposes of this analysis).

How important?	Valid N	Mean	Word anchor	SD	Median	Mode
b. Information source	355	1.41	High importance	.60	1	1
c. Professional development	356	1.48	High importance	.66	1	1
e. Division leadership	326	1.88	Moderate importance	.73	2	2
d. Development of position papers	348	1.95	Moderate importance	.73	2	2
a. Political advocacy	351	1.98	Moderate importance	.77	2	2

Respondents were invited to comment (Table 8).

Table 8. Open-ended comments to “How important is each of the following possible roles for the AFS NCD?” (unedited)

A professional scientific society should not engage in political advocacy. Advocacy should be limited to providing unbiased information to decision makers, proponents and the general public so that informed decisions are made.
Annual professional development and training opportunities play a significant role in maintaining and expanding fishery professional's expertise. Unfortunately opportunities are not always local (e.g. at National AFS convention). Regional opportunities for training/development are sometimes hard to come by.
As a professional organization, AFS should not be involved in politics in any way.
e. ("Division leadership") seems kind of circular. Leadership of our own group doesn't seem like something optional that we can say is of variable importance. Rather, I would say it's given.
How about a rating for a resource conservation topic
How is division leadership a role for the division? The role of NCD is to have leadership?
I believe science should inform policy, not advocate particular policies. As civil servants (most of us anyhow) our role is to implement policy, not make it.
I feel like the aspects of Political Advocacy and Position Papers should come from Parent AFS with the various Divisions and Chapters as a resource to help shape and direct these documents, but that it should come from AFS proper.
I think it is more important for the NCD to participate in advocacy and position papers THROUGH AFS, not as its own division. Hence, the low rating. That said, I think professional development and leadership are still the most important role.
I think our role at the NCD should be to provide sound science to the parent society and allow them to guide advocacy and development of position statements based on our regional knowledge.
If we are the best source of aquatic resource science information, then it is irresponsible not to ensure that our knowledge is shared with appropriate decision makers when they need the information to affect resource policy, decisions, and funding of critically important programs.
If we as professionals are not distributing accurate information and 'advocating' for sustainability (in any sense), then why are we trying to protect anything? AFS NCD provides a way for professionals to come together, make and advocate for positions, without the repercussions of doing this as an individual. I'm not saying we need to have an opinion on everything, but on controversial or important issues, we should express something if there is a consensus.
much of the current and future leadership will be from the "good old boys" roster; new blood/ideas is not appreciated, change is counterproductive to continuing the same way forward
NCD needs to provide a building block that provides local chapter with the information they need to fit into the National Perspective. Much of the Wallop Breaux Revision of the Sport Fishing Restoration Act started here, but the SED teamed with us to build a National Strategy.



Table 8 continued. Open-ended comments to “How important is each of the following possible roles for the AFS NCD?” (unedited)

NCD needs to work hard at building a coalition of partners in Natural resources within our geographic area. We lack a significant and focused voice in the political and social arenas in our area. To affect this, we need to legitimize our profession through professional development, disseminate position papers written expertly for a wide audience, and be seen as an authoritative source of info. All noted above
Not sure about e. Seems like the NCD would be involved in NCD leadership by default.
Political advocacy and sources of information should be either as close to the problem as possible (state chapters) or at the highest levels of influence (parent society). The division is a conduit for information exchange between those two levels.
Quality of technical work being employed in fisheries management is not as high as it could/should be. AFS as a professional society is likely the only available mechanism for professional standards or quality improvement.
the best way to change government is to influence the people
This can't be done by placing one click in each row. I mean, I have to chose one of these to know nothing about and one that is of NO importance? All of these roles are part of the AFS NCD duties. By the way, development of position papers IS political advocacy. But I put "a" in the "moderate importance" category meaning that it may not be very highly important for NCD officials to be testifying in state congress, for example, or waving placards.
While I believe that, as professionals and scientists, we should provide objective information for political issues, some issues have a great weight of evidence that needs to be shared via position papers in a more timely manner.
While political advocacy can be an important role for professional societies in today's world, the primary role should remain support of professionalism in the field.

Respondents were asked what priority should be given to each of a series of products and services unique to the NCD that can be improved, maintained, or created for Global Fisheries Leadership (Tables 9 and 10).

Table 9. “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Global Fisheries Leadership—with the NCD working at the regional level to contribute to the overall AFS global goal?”

What priority?	High priority	Moderate priority	Low priority	No priority	Don't know	Total
a. Develop resolutions and position statements with regional significance	34%	52%	11%	2%	1%	331
b. Provide continuing education courses with national leaders in the field at Midwest Fish & Wildlife Conferences	46%	42%	10%	1%	1%	330
c. Provide online continuing education courses with national leaders	40%	44%	13%	1%	2%	327
d. Promote sound, science-based practices for conservation of fisheries, aquatic communities, and habitats at the regional level	77%	21%	3%	0%	0%	330
e. Provide topic-oriented meetings or other forums for external discussion to identify science-based solutions to regional or national fisheries issues	49%	44%	7%	1%	0%	330
f. Support professional networking on issues with regional significance, including continuation of NCD technical committees	46%	44%	8%	0%	1%	332
g. Provide an archive for regional fisheries history	20%	43%	32%	2%	3%	332

Table 10. “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Global Fisheries Leadership—with the NCD working at the regional level to contribute to the overall AFS global goal?” Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest) where 1=“High priority,” 2=“Moderate priority,” 3=“Low priority,” 4=“No priority” (“Don’t know” eliminated for purposes of this analysis).

What priority?	Valid N	Mean	Word anchor	SD	Median	Mode
d. Promote sound, science-based practices for conservation of fisheries, aquatic communities, and habitats at the regional level	330	1.26	High priority	.50	1	1
e. Provide topic-oriented meetings or other forums for external discussion to identify science-based solutions to regional or national fisheries issues	330	1.59	Moderate priority	.65	2	1
f. Support professional networking on issues with regional significance, including continuation of NCD technical committees	328	1.63	Moderate priority	.65	2	1
b. Provide continuing education courses with national leaders in the field at Midwest Fish & Wildlife Conferences	328	1.66	Moderate priority	.71	2	1
c. Provide online continuing education courses with national leaders	322	1.75	Moderate priority	.73	2	2
a. Develop resolutions and position statements with regional significance	327	1.80	Moderate priority	.69	2	2
g. Provide an archive for regional fisheries history	323	2.17	Moderate priority	.78	2	2

Respondents were invited to comment (Table 11).

Table 11. Open-ended comments to “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Global Fisheries Leadership—with the NCD working at the regional level to contribute to the overall AFS global goal?” (unedited)

Continuing education being held only at Conferences will be missed by many staff due to travel restrictions in difficult budget times.
D.C. Booth Fish Hatchery in Spearfish, SD already serves as a DOI compliant archive for National and Regional fisheries history.
go to other conferences that are more accessible to people on a budget
I don't know why NCD would be involved in Global leadership - that is the parent society's job.
I think G is important, I don't think AFS has the capacity to do it.
if the problem goes to regional significance, it is assumed that the individuals states will concur and go along with guidelines or federal directions - not a simple process to agree on orders when there is no funds to follow the guidelines
In regards to item A. I think NCD should have a role in advising AFS parent of regional needs of resolutions and position statements.
Love the idea of continuing ed classes online. Certainly a niche unique to NCD. Only valuable if accessible (low cost/scholarship).

Table 11 continued. Open-ended comments to “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Global Fisheries Leadership—with the NCD working at the regional level to contribute to the overall AFS global goal?” (unedited)

One must be careful of the use of the word 'national'. AFS has been trying to be inclusive of fisheries professionals wherever they live, not just in the USA. A few years ago each use of national at a Governing Board meeting would have cost you \$1.
Resolutions regarding science and its role in informing policy are fine. Resolutions advocating particular policies are best left to non-scientific advocacy groups. I note that "science-based" occurs in items C and D - why not science-based resolutions??
The archive is particularly needed.
The archive should be at an appropriately prepared institution. However, the division may connect historical sources with appropriate archives. Due to travel restrictions, continuing education at the Midwest really serves a very limited population. More emphasis should be placed on virtual workshops for education and discussion of issues. The division properly facilitates development of regional resolutions and position statements by negotiating consensus positions between the states and provinces.

Respondents were asked what priority should be given to each of a series of products and services unique to the NCD that can be improved, maintained, or created for Education/Continuing Education (Tables 12 and 13).

Table 12. “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Education/Continuing Education?”

What priority?	High priority	Moderate priority	Low priority	No priority	Don't know	Total
a. Training and support for development of public outreach materials	20%	53%	24%	2%	2%	324
b. Identify academic training needed for a successful future workforce in the region	38%	44%	17%	1%	0%	318
c. Provide resources and opportunities for continuing education for fisheries and aquatic resource professionals	56%	37%	7%	0%	0%	322
d. Provide opportunities and support for development of public outreach materials	23%	50%	24%	1%	1%	320
e. Promote AFS Fisheries Professional Certification	15%	36%	40%	7%	3%	318
f. Provide opportunities for training on organizational capacity for chapter leaders (e.g., parliamentary procedure, fundraising, role in AFS)	17%	35%	41%	4%	3%	319
g. Mentoring society leaders from student subunits and chapters to prepare them for NCD and parent society positions	23%	48%	25%	2%	2%	322
h. Develop NCD support for the planning and hosting of the Midwest Fish & Wildlife Conference	26%	54%	16%	1%	2%	321

Table 13. "What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Education/Continuing Education?" Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest) where 1="High priority," 2="Moderate priority," 3="Low priority," 4="No priority" ("Don't know" eliminated for purposes of this analysis).

What priority?	Valid N	Mean	Word anchor	SD	Median	Mode
c. Provide resources and opportunities for continuing education for fisheries and aquatic resource professionals	322	1.51	Moderate priority	.63	1	1
b. Identify academic training needed for a successful future workforce in the region	318	1.81	Moderate priority	.74	2	2
h. Develop NCD support for the planning and hosting of the Midwest Fish & Wildlife Conference	313	1.92	Moderate priority	.69	2	2
d. Provide opportunities and support for development of public outreach materials	316	2.03	Moderate priority	.73	2	2
a. Training and support for development of public outreach materials	319	2.07	Moderate priority	.71	2	2
g. Mentoring society leaders from student subunits and chapters to prepare them for NCD and parent society positions	315	2.07	Moderate priority	.76	2	2
f. Provide opportunities for training on organizational capacity for chapter leaders (e.g., parliamentary procedure, fundraising, role in AFS)	311	2.33	Moderate priority	.81	2	3
e. Promote AFS Fisheries Professional Certification	310	2.39	Moderate priority	.83	2	3

Respondents were invited to comment (Table 14).

Table 14. Open-ended comments to "What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Education/Continuing Education?" (unedited)

a. and d. almost identical.
AFS Professional Certification is a complete waste of time, money, and resources, the only the reason folks obtain this is because Minnesota requires that you have it. This program is a money laundering, dirty portion of the National Chapter, please take it off your agenda.
Human dimensions and public participation (including engagement and empowerment of stakeholders as partners in resource management) are critical to the future of fisheries (and all natural resource) management, but fisheries professionals are ill prepared to lead these activities. Drowning people in technical information is not education and selling projects is not participatory planning for resource management. AFS needs to work with experts in education, human dimensions, and community planning to accomplish this.
I believe public outreach to be an appropriate role for the State and Federal agencies for which most AFS members work. While certification may be important in certain positions not all AFS members can benefit from this program so I would prioritize professional development activities over promotion of the certification program.
I think Certification is great, if it is a tangible asset to employers. If we push certification, can we demonstrate the benefit (job opportunity and advancement) gained because of it? I marked B & C as high priority because with the exodus of baby boomers, there are lots of new young professionals thrown into positions of significant decision-making.

Table 14 continued. Open-ended comments to “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Education/Continuing Education?” (unedited)

<p>its the public that controls what resource agencies do - the squeaky wheel gets the attention; most fisheries professionals cannot and do not work well with the public, the problem is that an informed public is educated, they can and will make informed decisions, professional work is simpler to do with an educated public, but if the biologist wants to do good old boy work, then never tell the public the full story and get them to smart too lead blindly to bad decisions</p>
<p>mentoring iportant for next generation of conservation professionals, not for AFS survival, but for the discipline. AFS survival will follow a robust discipline.</p>
<p>Not sure how a and d differ.</p>
<p>Online training programs could be a real benefit to the Society and the NCD. Online training could make the NCD useful to managers. Mentoring could help network experienced academics and managers and should be a two way street. Organizational capacity, academic training needs and conference planning will largely occur within existing structures that are pretty well developed.</p>
<p>only promote fisheries certification if there is a distinct advantage for members to be certified, right now that doesn't seem to be the case. Negotiate salary increases, desired certification validation on job openings, etc.</p>
<p>Outreach materials should be developed at the local or national level. The division may connect those needing training with oppourtunities for communications training. The division should promote parent society programs among the chapters and subunits.</p>
<p>Professional Certification provides little value beyond pride unless Agencies buy in and start offering incentives to be certified.</p>
<p>The certification process will be low priority until it has financial incentives.</p>
<p>Two items: Professional certification as presently delivered is too specific to fish biologists when the society has professionals in many other capacities. NCD needs to take control of its annual meeting and run it to provide funds to the division rather than to the MWFWC.</p>
<p>universities are better for public outreach</p>
<p>Very few professional individuals get to attend the Midwest, and even fewer attend the AFS national conference. Most attendees are academicians, students or leaders. Some of this is lack of funding, some is lack of interest. There needs to be a way that those of modest means can participate in these regional and national events. Travel is not always an option.</p>

Respondents were asked what priority should be given to each of a series of products and services unique to the NCD that can be improved, maintained, or created for Value of Membership (Tables 15 and 16).

Table 15. "What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Value of Membership?"

What priority?	High priority	Moderate priority	Low priority	No priority	Don't know	Total
a. Build partnerships at the regional level with other natural resource professional and scientific organizations with common goals	41%	49%	8%	0%	2%	307
b. Provide media by which information on issues of regional importance can be shared/discussed internally among the membership (e.g., bulletin board, blog)	27%	52%	18%	2%	1%	307
c. Support adequate and stable funding at the regional level for fisheries research and management	50%	33%	12%	2%	2%	306
d. Support efforts to increase professional diversity (e.g., Hutton & Equal Opportunities fund)	20%	41%	28%	8%	2%	309
e. Support student development, collaboration, and networking online and at regional meetings	41%	49%	9%	1%	1%	303
f. Provide an archive for regional fisheries history (e.g., documents, photos)	20%	35%	38%	5%	2%	305
g. Support adequate and stable funding at the regional level for fisheries research and management	46%	37%	11%	3%	2%	306
h. Create new electronic support services for Chapters (e.g., webpage templates, membership tracking, online meeting materials)	25%	51%	22%	1%	0%	308
i. Create a professional travel award to assist members in attending regional and national AFS meetings	21%	39%	36%	3%	1%	307

Table 16. "What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Value of Membership?" Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest) where 1="High priority," 2="Moderate priority," 3="Low priority," 4="No priority" ("Don't know" eliminated for purposes of this analysis).

What priority?	Valid N	Mean	Word anchor	SD	Median	Mode
c. Support adequate and stable funding at the regional level for fisheries research and management <sup>a</sup>	300	1.66	Moderate priority	.79	1	1
a. Build partnerships at the regional level with other natural resource professional and scientific organizations with common goals	301	1.67	Moderate priority	.63	2	2
e. Support student development, collaboration, and networking online and at regional meetings	301	1.69	Moderate priority	.66	2	2
g. Support adequate and stable funding at the regional level for fisheries research and management	299	1.71	Moderate priority	.80	2	1
b. Provide media by which information on issues of regional importance can be shared/discussed internally among the membership (e.g., bulletin board, blog)	305	1.94	Moderate priority	.72	2	2
h. Create new electronic support services for Chapters (e.g., webpage templates, membership tracking, online meeting materials)	307	1.99	Moderate priority	.72	2	2
i. Create a professional travel award to assist members in attending regional and national AFS meetings	303	2.21	Moderate priority	.81	2	2
d. Support efforts to increase professional diversity (e.g., Hutton & Equal Opportunities fund)	302	2.25	Moderate priority	.88	2	2
f. Provide an archive for regional fisheries history (e.g., documents, photos)	298	2.29	Moderate priority	.84	2	3

a. Items c and g were inadvertently duplicated

Respondents were invited to comment (Table 17).

Table 17. Open-ended comments to “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Value of Membership?” (unedited)

(a) and (b) stand opposed. Provide media where info shared across other organizations. Also, create a professional travel award for ANY meeting of importance to fisheries mgt and research.
AFS Parent Society has electronic support services for subunits. Same is true for travel awards.
are c and g the same?
b, c, and g are really out of your reach. Encourage, but don't think you can do it. Rely in National to do that and support them. A historical archive if structured from the point of view of a historian, could help us avoid repeating mistakes and helping us develop a pattern that will allow future leader to determine what works.
C and G are the same question? Why?
c and g are the same question. b. several Sections already have online discussion groups that provide a forum for discussing current issues. These could be expanded or linked.
c and g are the same. I'm someone else has already informed you of this.
c. and g. identical.
C) and g) appear the same. Rather than creating a professional travel award, the division and the parent society need to develop a communication/awareness plan and deliver that to agencies that increasingly seem to not understand that professional development and network are key aspects of a professional biologist's career.
D - sounds like unequal opportunity ... priority should be given to what reaches most members... Only B and H would apply to me
D.C. Booth Fish Hatchery in Spearfish, SD already serves as a DOI compliant archive for National and Regional fisheries history.
Develop cost effective alternatives for members who want to attend at their own expense. Many agencies or organizations currently have travel restrictions. i.e. Brown bag alternatives for conferences
Diversity goals within AFS are being achieved, at least for women. New focus should be on people of color, who are underrepresented.
Funds to support travel to the national meeting are sorely needed given the current fiscal climate for state workers!
g is the same as c
I don't think NCD should be seen as a funding organization, other than to try to fund a full or part time staffer position internally
I would like to see more focus on the resource and less on the meeting aspect of the fisheries profession. I have noticed not much is getting done at these meetings other than planning another meeting.
Is C exactly the same as G?
items c. and g. are the same
Note that different replies to C and G could confound results.
Some of these contain duplicates

Table 17 continued. Open-ended comments to “What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Value of Membership?” (unedited)

Students often receive support for professional development while in school. Those professionals out-of-school do not - and they are the ones affecting fisheries management policy - most in need of continuing support and development.
Support for the "next generation" of managers is critical, but it must be grounded in the changing paradigm for the management of resources.
Why are c and g the same? Support student travel awards over professional travel awards.
Would webinars allow more members to participate in professional training and regional meetings?

Respondents were asked what priority should be given to each of two overall approaches to make the NCD strategic plan most useful to them (Tables 18 and 19).

Table 18. “For the NCD strategic plan to be most useful to you, what priority would you assign each of the following overall approaches?”

What priority?	High priority	Moderate priority	Low priority	No priority	Don't know	Total
a. Visionary - providing general objectives for units (not operational activities)	30%	48%	15%	2%	6%	305
b. Detailed - providing specific direction to units (more operational)	21%	30%	39%	4%	6%	303

Table 19. “For the NCD strategic plan to be most useful to you, what priority would you assign each of the following overall approaches?” Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest) where 1=“High priority,” 2=“Moderate priority,” 3=“Low priority,” 4=“No priority” (“Don't know” eliminated for purposes of this analysis).

What priority?	Valid N	Mean	Word anchor	SD	Median	Mode
a. Visionary - providing general objectives for units (not operational activities)	288	1.88	Moderate priority	.73	2	2
b. Detailed - providing specific direction to units (more operational)	284	2.27	Moderate priority	.86	2	3

Respondents were invited to comment (Table 20).

Table 20. Open-ended comments to “For the NCD strategic plan to be most useful to you, what priority would you assign each of the following overall approaches?” (unedited)

"Visionary" means general objectives?
Actually I would advocate for a mix of the above without being too prescriptive for chapters. Some operational guidance without undue burdens would probably be welcomes by most chapters.
Chapters will necessarily have different needs and issues than the division which should attempt to gather, collate and integrate chapter positions into regional visions.
Each division will choose to operate as it sees fit within the mandate of the AFS and its members
I am not convinced specific operational direction to units is necessary - this might impede flexibility at the local level; Direction perhaps should be specific [notional/topical] but not necessarily [or just] operational.



Table 20 continued. Open-ended comments to “For the NCD strategic plan to be most useful to you, what priority would you assign each of the following overall approaches?” (unedited)

I think a 'template' or ideas might be good to provide, but nothing that can't be customized to each units' needs.
I think a strategic plan, by some definitions, needs to be big picture, let tactical and operational plans fall out from a big picture strategic plan.
Not a well defined option. Both are needed and the span of view frequently depends on the issue. Broad goals are needed in some areas and specific goals are needed and possible in others.
Perhaps provide sample suggestions of direction to jump start units.
Provide guidance and direction, not specific tasks. Let the Chapters and sub-units work within their strengths.

Respondents were asked how useful each of a series of possible plan elements would be to them (Tables 21 and 22).

Table 21. “How useful to you would each of the following possible plan elements be?”

How useful?	Extremely useful	Very useful	Somewhat useful	Not useful	Don't know	Total
a. Provide a glossary of terms (e.g., recruitment, stakeholder, transparency)	7%	23%	55%	13%	2%	304
b. Provide guidance to Chapter officers on how the plan can be used	17%	46%	28%	5%	5%	303
c. Track achievements by subunits, chapters, and NCD leadership against the plan's objectives	12%	42%	37%	5%	4%	302
d. Provide an online form for NCD subunit and chapter annual reports	14%	50%	31%	2%	4%	303
e. Provide a quick reference (e.g., dashboard) of progress implementing the plan on the Division website	9%	41%	41%	6%	3%	304
f. Revise the NCD Most Active Chapter award to reflect Chapter activities implementing the NCD plan	6%	30%	42%	13%	8%	304

Table 22. “How useful to you would each of the following possible plan elements be?” Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from most useful) where 1=“Extremely useful,” 2=“Very useful,” 3=“Somewhat useful,” 4=“Not useful” (“Don’t know” eliminated for purposes of this analysis).

How useful?	Valid N	Mean	Word anchor	SD	Median	Mode
b. Provide guidance to Chapter officers on how the plan can be used	288	2.21	Very useful	.79	2	2
d. Provide an online form for NCD subunit and chapter annual reports	291	2.22	Very useful	.70	2	2
c. Track achievements by subunits, chapters, and NCD leadership against the plan's objectives	290	2.35	Very useful	.76	2	2
e. Provide a quick reference (e.g., dashboard) of progress implementing the plan on the Division website	294	2.45	Very useful	.74	2	2
f. Revise the NCD Most Active Chapter award to reflect Chapter activities implementing the NCD plan	279	2.69	Somewhat useful	.80	3	3
a. Provide a glossary of terms (e.g., recruitment, stakeholder, transparency)	297	2.74	Somewhat useful	.77	3	3

Respondents were invited to comment (Table 23).

Table 23. Open-ended comments to “How useful to you would each of the following possible plan elements be?” (unedited)

a., b., and d. would be especially helpful for student sub-units and new members. Perhaps help in getting younger members involved in governance.
The plan needs to be written in plain language so a glossary is not necessary.
To be honest...I don't know that I will ever read the NCD plan.

Respondents were asked how much attention they thought NCD should devote to a series of possible regional threats, challenges, or opportunities over the next five years (Tables 24 and 25).

Table 24. “How much attention do you think the NCD should devote to each of the following possible regional threats, challenges, or opportunities over the next 5 years?”

How much attention?	Utmost attention	High attention	Moderate attention	Low attention	No attention	Don't know	Total
a. Globalization of trade and transportation (e.g., international stock management, invasive species, disease introduction)	28%	46%	20%	5%	1%	0%	301
b. Shifting environmental pressures (e.g., climate change, emerging contaminants)	20%	42%	27%	9%	1%	0%	299
c. Socioeconomic challenges (e.g., economic pressure, volatile markets, a transient and retiring workforce, energy resources)	14%	34%	36%	15%	1%	1%	301
d. Paradigm shifts in fisheries management approaches (e.g., ecosystem-based management, adaptive management)	23%	39%	29%	8%	0%	1%	300
e. Nature deficit syndrome (e.g., urbanization, demographics, limited outdoor experiences)	22%	40%	28%	9%	0%	0%	301
f. Changes in electronic communication (e.g., social media, online networking)	12%	30%	38%	18%	1%	0%	299
g. Recruitment and retention of employees in the fisheries field	15%	26%	34%	19%	5%	0%	299
h. Shifts in constituencies (e.g., traditional hunter and angler base)	14%	41%	32%	11%	1%	1%	300
i. Changes in technology for fisheries assessment and management	19%	49%	24%	7%	0%	1%	299
j. Adequate training for young professionals in techniques needed for research and management	30%	37%	24%	7%	1%	0%	300
k. Shifting business model for professional societies and government (e.g., participatory decision-making)	8%	26%	40%	18%	1%	6%	300

Table 25. “How much attention do you think the NCD should devote to each of the following possible regional threats, challenges, or opportunities over the next 5 years?” Measures of central tendency and dispersion, and word anchors based on rounded mean scores (ranked from highest attention) where 1=“Utmost attention,” 2=“High attention,” 3=“Moderate attention,” 4=“Low attention,” 5=“No attention” (“Don't know” eliminated for purposes of this analysis).

How much attention?	Valid N	Mean	Word anchor	SD	Median	Mode
a. Globalization of trade and transportation (e.g., international stock management, invasive species, disease introduction)	300	2.06	High attention	.90	2	2
j. Adequate training for young professionals in techniques needed for research and management	300	2.11	High attention	.94	2	2
i. Changes in technology for fisheries assessment and management	297	2.20	High attention	.83	2	2
d. Paradigm shifts in fisheries management approaches (e.g., ecosystem-based management, adaptive management)	297	2.23	High attention	.90	2	2
e. Nature deficit syndrome (e.g., urbanization, demographics, limited outdoor experiences)	300	2.25	High attention	.91	2	2
b. Shifting environmental pressures (e.g., climate change, emerging contaminants)	299	2.28	High attention	.93	2	2
h. Shifts in constituencies (e.g., traditional hunter and angler base)	298	2.45	High attention	.92	2	2
c. Socioeconomic challenges (e.g., economic pressure, volatile markets, a transient and retiring workforce, energy resources)	299	2.54	Moderate attention	.94	3	3
f. Changes in electronic communication (e.g., social media, online networking)	299	2.67	Moderate attention	.95	3	3
g. Recruitment and retention of employees in the fisheries field	298	2.72	Moderate attention	1.10	3	3
k. Shifting business model for professional societies and government (e.g., participatory decision-making)	282	2.77	Moderate attention	.91	3	3

Respondents were invited to comment (Table 26).

Table 26. Open-ended comments to “How much attention do you think the NCD should devote to each of the following possible regional threats, challenges, or opportunities over the next 5 years?” (unedited)

Biosecurity should be of the utmost attention, yet it is lacking here. Few understand the practices, implementation and understanding of biosecurity.
I think we, as a profession, need to lighten up on the whole recruitment and retention of employees in the fisheries field. We have absolutely no shortage of young, quality, aspiring fisheries professionals entering the field. Just ask agency HR departments how many applicants they get for an average fisheries biologist position posting?! It isn't like Pharmacy where drug stores are begging pharmacists to come and work for them.
Is it too late to develop professional criteria for universities like the foresters have done?
It is difficult to forecast what will be important 5 years from now; the society and the division needs to develop a capability to change rapidly and effectively in the face of changing societal demands and challenges.
J. should not just be limited to "young" professionals. Older practicing professionals have a widely varying level of quality in the work they do - from the technical to the paradigms, to incorporating social science into fish man. decision making.
managing fish is simple, count the fish in the net and make a graph; getting to the point that the professional can manage people and/or Administration is the most difficult achieve; changing market (AIS, climate, resource allocation, etc.) is missed by those who deal in the past or traditional fish management; recreational fishing is competing with every other recreational opportunity, but fishing is not organized baby-sitting; professionals needs to move to getting involved with marketing more than counting fish caught in a net; getting the public to have a good fishing experience means that they are not likely to be against fishing or aquatic resource issues
My view is that a professional society should be focussed on moving science and management forward. Items a, b, c, d, h, j and k largely fall outside of areas we can really directly influence.
Politics needs to fall in this someplace
Skills for management should include inherent understanding of social sciences - we attempt to manage resources for PEOPLE and PEOPLE are the root of most of the issues that really impact fisheries...
this survey is getting long...
Topics marked no / low attention should be (and / or are) addressed at agency level, not by AFS

Respondents were invited to offer any additional comments or suggestions (Table 27).

Table 27. "Please feel free to provide comments/suggestions on the Strategic Plan revision process or NCD functions in general." (unedited)

<p>Although maybe not directly applicable to the Strategic Plan, I think increasing student involvement is essential to the future of the Society at all levels. This obviously could be incorporated into the strategic plan in several ways (e.g., including a student representative in the revision process, increased focus on professional development, increased communication and networking capabilities). Additionally, I think the NCD should consider the timing of the Midwest Fish and Wildlife conference and its impacts on student involvement. Currently and for as long as I can remember, it has been during or very near finals week of the fall semester. Therefore, students who want to be involved cannot because of their academic responsibilities. The current timing has also been detrimental to attendance due to weather conditions (e.g., Minneapolis, Springfield). As such, numerous individuals do not attend some meeting locations in which severe weather may increase travel time during a particular busy time. Although I know the meeting timing is not directly related to the Strategic Plan Revision, I think it needs to be considered and I took the opportunity in this forum to explain my grievances. Thank you for all of your hard work for our Society. Jesse Fischer, President-Student Subsection of the Education Section</p>
<p>As a former President of two Student Subunits (one in the north-central division, and one in the western division), I feel the Division's need to do a better job of communicating and working with Student Subunits within their division because: A) many times state chapters do not do a good job of this, and B) why should subunits bother with divisions when they are already dealing with state chapters and national chapters? Additionally, give the most active subunit award to different schools every year, its unfair that one subunit wins every year (not matter what they are accomplishing).</p>
<p>As an officer of a student subunit, it would beneficial to provide more information about NCD to undergraduate students and what opportunities there are in becoming involved with NCD. I think if we could tie what is happening at the local level with the NCD level, much more information could be shared among various organizations.</p>
<p>Biosecurity and disease prevention should be one of the highest priorities, yet has not been offered as topic for ranking. This is why fisheries biologists are not aware of the importance of biosecurity, AFS is among those not officially recognizing the importance.</p>
<p>Disclaimer: I am an 74 year old retired fisheries administrator and later a resource agency administrator. I have remained active with my University Adjunct appointment. My views are that NCD can benefit from a more locally focussed point of view, rather than dealing with National and International levels of commitment. Narrower more locally significant initiatives are likely to attract management level members than the less locally relevant issue. I am Jim Addis former Wisconsin Fisheries Chief. If you would like to discuss this more my email is: jimaddis@mac.com Ph 608-244-3103. Keep up the good work!</p>
<p>Good luck Gwen. I know you will continue to keep the NCD a leader in AFS.</p>
<p>Good luck with this effort. It will feel like herding cats (or fish for that matter).</p>
<p>Having been involved in one NCD and two parent society strategic plans including the most recent society plan I believe NCD should take from the parent society plan what suits the division and develop a regional plan from there, fully recognizing the geographic, political and demographic diversity of the largest division in AFS.</p>

Table 27 continued. "Please feel free to provide comments/suggestions on the Strategic Plan revision process or NCD functions in general." (unedited)

<p>I am a retired state employee with background in both regulatory compliance and resource management. I currently am a board member of a nongovernment conservation organization. I believe that supporting professional development and communication should be a primary role of AFS. I dropped my membership in the parent society upon retirement but still support that ASF as an effective professional society for people working in the field.</p>
<p>I applaud your leadership for undertaking this effort - its critical to provided real value and leadership, and for ensuring relevancy of the organization. AFS is unique in its role and scope - and concentrating on provided the services not provided by any other entity is critical. Thank you for your efforts in reaching out on this effort. keep up the good work.</p>
<p>I have always been unclear of the Division role in AFS. It would be great to see a clearer relationship/link between the chapters&gt;division&gt;parent society as it is not clear (to me)at the moment.</p>
<p>I think one of the greatest challenges we face in the next 5 years is maintaining relevancy for our profession and fish and wildlife agencies. I'd like NCD and AFS in general to set a tone for transformational change so that our profession can thrive in the years to come.</p>
<p>I think that we (AFS as a whole) are losing out a lot because we have a lot of members that are not parent society members. I would like to see the Governing Board discuss the changing of our membership structure. I think you lower Parent Society dues and make it mandatory to be a parent society member before a chapter member. You pay your parent society dues and then you decide which "home" chapter is yours. I think we would have greater than 20,000 AFS members if we did that.</p>
<p>I think we need to turn course and pay attention to the resources. Less planning of meetings and more useful work. We have breed a generation of fisheries workers who never work or care about the field.</p>
<p>I would like to see more assistance with certification and more value given to those professionals that are certified. Being a Certified Fisheries Professional through AFS really hasn't given me an "edge" over other employees without certification. How to do make certification valuable?</p>
<p>in this state organization, AFS is not held in high regard; AFS has not been promoted or internally respected; the biologist needs to understand that AFS can help them do high quality work and help them work with the public; the new Strat plan should point this out to the individual biologist and their organization; high quality work should be able to speak for itself as the desired results for the resource</p>
<p>It would be helpful to know years of experience and educational level for this survey</p>
<p>Needs emphasis on student training. In particular, fisheries programs and curricula are largely outdated, and need more emphasis on newer technologies (including GIS which is invaluable training, but is still under represented in fisheries curricula). Some guidance could also be provided to fisheries programs dealing with university mandated "electives" which, combined with AFS required fisheries courses, mean that undergraduates wither have to take excessive course loads, take an extra semester to graduate, or do not get to take any true elective courses. Perhaps more focused AFS certification would allow increased flexibility for both fisheries faculties/curricula and for students.</p>

Table 27 continued. "Please feel free to provide comments/suggestions on the Strategic Plan revision process or NCD functions in general." (unedited)

<p>On most of these types of surveys we have a section that requests survey participants identify their affiliation. This survey was similar in that it left out Tribal government as an affiliation so I needed to select "other". I would recommend that AFS please begin including Tribal as an affiliation and not overlooked as an other.</p>
<p>Thanks for the opportunity to share my thoughts!</p>
<p>The discussion of the value of establishing a more progressive communication link from Chapter to Division to Parent Society should be more clear. That is, how is the Division-level useful for membership in both directions?</p>
<p>The division should concentrate on providing a forum for interaction between professionals, provide continuing education to our members, promote education of students and young professionals, provide NON-BIASED scientific based information to political decision makers and the general population and promote the cessation of jumping on environmental band wagons just to generate funds for research to ensure continuation of federal and university programs.</p>
<p>The Division should think about where it fits in with the Chapter and the Parent Society so as not to duplicate effort and make members choose which subunit to support. The Chapter is closer to the membership and local problems, why not help facilitate some of their efforts, like providing funding for continuing education workshops or passing on ideas that have been successful activities for individual chapters. At the Parent Society level, the Division, can link the chapters to the national level by providing localized feedback.</p>
<p>The society and NCD has never done a good job of applying good science to important regional/international issues. It should be looked upon as an important source of scientific opinion and guidance at many levels of governance. It isn't now.</p>
<p>The strength of an organization is best measured when times are difficult. Clear thinking, courage and perseverance are required when issues are difficult. Compromise is good - but not at the cost of abandoning integrity.</p>
<p>This survey is a great idea</p>
<p>To me, the primary value of NCD is to provide a regional link among chapters. The more opportunities for chapter members and leadership to interact and talk about how they are handling similar issues, the better.</p>
<p>Utmost attention needs to be paid to changing climate. Much of the general public is still unsure of global warming; I believe that more programs should be aimed at grade school students.</p>
<p>Will anyone beyond the NCD or academia read this document?</p>
<p>Total</p>

## Appendix A: A Survey to Help Our Strategic Plan Revision

Please use the "Back" and "Next" buttons at the bottom of each page to navigate within the survey.

***PLEASE DO NOT USE YOUR BROWSER BUTTONS; YOU WILL DEPART THE SURVEY IF YOU DO.***

*We encourage you to complete and "Submit" the survey in one session. However, the "Save" button will close the survey, saving data you entered to that point.*

*You can re-enter the survey using the original link, returning to the last question answered.*

Please click on "Next" button to enter the survey

How important is each of the following possible roles for the American Fisheries Society (AFS) North Central Division (NCD)? (please click one in each row).

	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>No</i>	<i>Don't</i>
	<i>Importance importance importance importance know</i>				
a. Political advocacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Information source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Development of position papers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Division leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment/Suggestion?

What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Global Fisheries Leadership--with the NCD working at the regional level to contribute to the overall AFS global goal? (please click one in each row).

	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>No</i>	<i>Don't</i>
	<i>priority priority priority priority know</i>				
a. Develop resolutions and position statements with regional significance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Provide continuing education courses with national leaders in the field at Midwest Fish & Wildlife Conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Provide online continuing education courses with national leaders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Promote sound, science-based practices for conservation of fisheries, aquatic communities, and habitats at the regional level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Provide topic-oriented meetings or other forums for external discussion to identify science-based solutions to regional or national fisheries issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



- |   |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| f. Support professional networking on issues with regional significance, including continuation of NCD technical committees | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Provide an archive for regional fisheries history  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Comment/Suggestion?**

**What priority would you assign to each of the following products and services unique to the NCD that we can improve, maintain, or create for Education/Continuing Education (please click one in each row).**

- |  | <i>High<br/>priority</i> | <i>Moderate<br/>priority</i> | <i>Low<br/>priority</i>  | <i>No<br/>priority</i>   | <i>Don't<br/>know</i>    |
|--|--------------------------|------------------------------|--------------------------|--------------------------|--------------------------|
| a. Training and support for development of public outreach materials   | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Identify academic training needed for a successful future workforce in the region   | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Provide resources and opportunities for continuing education for fisheries and aquatic resource professionals                               | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Provide opportunities and support for development of public outreach materials  | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Promote AFS Fisheries Professional Certification  | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Provide opportunities for training on organizational capacity for chapter leaders (e.g., parliamentary procedure, fundraising, role in AFS) | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Mentoring society leaders from student subunits and chapters to prepare them for NCD and parent society positions                           | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Develop NCD support for the planning and hosting of the Midwest Fish & Wildlife Conference  | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Comment/Suggestion?**

**What priority would you assign each of the following products and services unique to the NCD that we can improve, maintain, or create for Value of Membership? (please click one in each row).**

- |   | <i>High<br/>priority</i> | <i>Moderate<br/>priority</i> | <i>Low<br/>priority</i>  | <i>No<br/>priority</i>   | <i>Don't<br/>know</i>    |
|---|--------------------------|------------------------------|--------------------------|--------------------------|--------------------------|
| a. Build partnerships at the regional level with other natural resource professional and scientific organizations with common goals                         | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Provide media by which information on issues of regional importance can be shared/discussed internally among the membership (e.g., bulletin board, blog) | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

c. Support adequate and stable funding at the regional level for fisheries research and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Support efforts to increase professional diversity (e.g., Hutton & Equal Opportunities fund)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Support student development, collaboration, and networking online and at regional meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Provide an archive for regional fisheries history (e.g., documents, photos)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Support adequate and stable funding at the regional level for fisheries research and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Create new electronic support services for Chapters (e.g., webpage templates, membership tracking, online meeting materials)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Create a professional travel award to assist members in attending regional and national AFS meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comment/Suggestion?**

**For the NCD strategic plan to be most useful to you, what priority would you assign each of the following overall approaches? (please click one in each row).**

*High priority   Moderate priority   Low priority   No priority   Don't know*

a. Visionary - providing general objectives for units (not operational activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Detailed - providing specific direction to units (more operational)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comment/Suggestion?**

**How useful to you would each of the following possible plan elements be? (please click one in each row).**

*Extremely useful   Very useful   Somewhat useful   Not useful   Don't know*

a. Provide a glossary of terms (e.g., recruitment, stakeholder, transparency)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Provide guidance to Chapter officers on how the plan can be used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Track achievements by subunits, chapters, and NCD leadership against the plan's objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Provide an online form for NCD subunit and chapter annual reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Provide a quick reference (e.g., dashboard) of progress implementing the plan on the Division website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f. Revise the NCD Most Active Chapter award to reflect Chapter activities implementing the NCD plan

|  |  |  |

**Comment/Suggestion?**

**How much attention do you think the NCD should devote to each of the following possible regional threats, challenges, or opportunities over the next 5 years (please click one in each row).**

	<i>Utmost attention</i>	<i>High attention</i>	<i>Moderate attention</i>	<i>Low attention</i>	<i>No attention</i>	<i>Don't know</i>
a. Globalization of trade and transportation (e.g., international stock management, invasive species, disease introduction)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Shifting environmental pressures (e.g., climate change, emerging contaminants)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Socioeconomic challenges (e.g., economic pressure, volatile markets, a transient and retiring workforce, energy resources)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Paradigm shifts in fisheries management approaches (e.g., ecosystem-based management, adaptive management)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Nature deficit syndrome (e.g., urbanization, demographics, limited outdoor experiences)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Changes in electronic communication (e.g., social media, online networking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Recruitment and retention of employees in the fisheries field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Shifts in constituencies (e.g., traditional hunter and angler base)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Changes in technology for fisheries assessment and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Adequate training for young professionals in techniques needed for research and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Shifting business model for professional societies and government (e.g., participatory decision-making)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comment/Suggestion?**

**Your primary employment affiliation (please click one)?**

- Federal agency
- Non-government organization
- Private business
- State/Provincial agency
- University
- Other

**Are you a member of the AFS Parent Society:**

- Yes
- No
- Don't know

**Are you:**

- Female
- Male

**Please indicate your age:**

- 24 or under
- 25-44
- 45-64
- 65 or over

**Feel free to provide final comments/suggestions on the Strategic Plan revision process or NCD functions in general.**

**Click "Submit" when you are ready to complete the survey. Once you have clicked on "Submit" you will not be able to return to the survey to make changes.**

**Thank you for taking the time to complete this survey!**

Appendix B: Basic Frequencies for All Questions

**Appendix B: Frequency Analysis**

**a. Political advocacy**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High Importance	96	24.1	26.6	26.6
	Moderate importance	177	44.5	49.0	75.6
	Low importance	66	16.6	18.3	93.9
	No importance	12	3.0	3.3	97.2
	Don't know	10	2.5	2.8	100.0
	Total	361	90.7	100.0	
Missing	System	37	9.3		
Total		398	100.0		

**b. Information source**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High Importance	227	57.0	63.1	63.1
	Moderate importance	111	27.9	30.8	93.9
	Low importance	15	3.8	4.2	98.1
	No importance	2	.5	.6	98.6
	Don't know	5	1.3	1.4	100.0
	Total	360	90.5	100.0	
Missing	System	38	9.5		
Total		398	100.0		

**c. Professional development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High Importance	213	53.5	59.3	59.3
	Moderate importance	117	29.4	32.6	91.9
	Low importance	23	5.8	6.4	98.3
	No importance	3	.8	.8	99.2
	Don't know	3	.8	.8	100.0
	Total	359	90.2	100.0	
Missing	System	39	9.8		
Total		398	100.0		

**d. Development of position papers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High Importance	98	24.6	27.3	27.3
	Moderate importance	176	44.2	49.0	76.3
	Low importance	69	17.3	19.2	95.5
	No importance	5	1.3	1.4	96.9
	Don't know	11	2.8	3.1	100.0
	Total	359	90.2	100.0	
Missing	System	39	9.8		
Total		398	100.0		

**e. Division leadership**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High Importance	101	25.4	28.5	28.5
	Moderate importance	169	42.5	47.6	76.1
	Low importance	49	12.3	13.8	89.9
	No importance	7	1.8	2.0	91.8
	Don't know	29	7.3	8.2	100.0
	Total	355	89.2	100.0	
Missing	System	43	10.8		
Total		398	100.0		

**a. Develop resolutions and position statements with regional significance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	113	28.4	34.1	34.1
	Moderate priority	172	43.2	52.0	86.1
	Low priority	37	9.3	11.2	97.3
	No priority	5	1.3	1.5	98.8
	Don't know	4	1.0	1.2	100.0
	Total	331	83.2	100.0	
Missing	System	67	16.8		
Total		398	100.0		

**b. Provide continuing education courses with national leaders in the field at Midwest Fish & Wildlife Conferences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	152	38.2	46.1	46.1
	Moderate priority	138	34.7	41.8	87.9
	Low priority	34	8.5	10.3	98.2
	No priority	4	1.0	1.2	99.4
	Don't know	2	.5	.6	100.0
	Total	330	82.9	100.0	
Missing	System	68	17.1		
Total		398	100.0		

**c. Provide online continuing education courses with national leaders**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	130	32.7	39.8	39.8
	Moderate priority	145	36.4	44.3	84.1
	Low priority	43	10.8	13.1	97.2
	No priority	4	1.0	1.2	98.5
	Don't know	5	1.3	1.5	100.0
	Total	327	82.2	100.0	
Missing	System	71	17.8		
Total		398	100.0		

**d. Promote sound, science-based practices for conservation of fisheries, aquatic communities, and habitats at the regional level**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	253	63.6	76.7	76.7
	Moderate priority	68	17.1	20.6	97.3
	Low priority	9	2.3	2.7	100.0
	Total	330	82.9	100.0	
Missing	System	68	17.1		
Total		398	100.0		

**e. Provide topic-oriented meetings or other forums for external discussion to identify science-based solutions to regional or national fisheries issues**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	161	40.5	48.8	48.8
	Moderate priority	144	36.2	43.6	92.4
	Low priority	23	5.8	7.0	99.4
	No priority	2	.5	.6	100.0
	Total	330	82.9	100.0	
Missing	System	68	17.1		
Total		398	100.0		

**f. Support professional networking on issues with regional significance, including continuation of NCD technical committees**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	153	38.4	46.1	46.1
	Moderate priority	146	36.7	44.0	90.1
	Low priority	28	7.0	8.4	98.5
	No priority	1	.3	.3	98.8
	Don't know	4	1.0	1.2	100.0
	Total	332	83.4	100.0	
Missing	System	66	16.6		
Total		398	100.0		

**g. Provide an archive for regional fisheries history**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	66	16.6	19.9	19.9
	Moderate priority	143	35.9	43.1	63.0
	Low priority	106	26.6	31.9	94.9
	No priority	8	2.0	2.4	97.3
	Don't know	9	2.3	2.7	100.0
	Total	332	83.4	100.0	
Missing	System	66	16.6		
Total		398	100.0		

**a. Training and support for development of public outreach materials**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	66	16.6	20.4	20.4
	Moderate priority	171	43.0	52.8	73.1
	Low priority	77	19.3	23.8	96.9
	No priority	5	1.3	1.5	98.5
	Don't know	5	1.3	1.5	100.0
	Total	324	81.4	100.0	
Missing	System	74	18.6		
Total		398	100.0		

**b. Identify academic training needed for a successful future workforce in the region**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	121	30.4	38.1	38.1
	Moderate priority	140	35.2	44.0	82.1
	Low priority	55	13.8	17.3	99.4
	No priority	2	.5	.6	100.0
	Total	318	79.9	100.0	
Missing	System	80	20.1		
Total		398	100.0		

**c. Provide resources and opportunities for continuing education for fisheries and aquatic resource professionals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	181	45.5	56.2	56.2
	Moderate priority	118	29.6	36.6	92.9
	Low priority	23	5.8	7.1	100.0
	Total	322	80.9	100.0	
Missing	System	76	19.1		
Total		398	100.0		

**d. Provide opportunities and support for development of public outreach materials**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	75	18.8	23.4	23.4
	Moderate priority	159	39.9	49.7	73.1
	Low priority	78	19.6	24.4	97.5
	No priority	4	1.0	1.3	98.8
	Don't know	4	1.0	1.3	100.0
	Total	320	80.4	100.0	
Missing	System	78	19.6		
Total		398	100.0		



**e. Promote AFS Fisheries Professional Certification**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	48	12.1	15.1	15.1
	Moderate priority	115	28.9	36.2	51.3
	Low priority	126	31.7	39.6	90.9
	No priority	21	5.3	6.6	97.5
	Don't know	8	2.0	2.5	100.0
	Total	318	79.9	100.0	
Missing	System	80	20.1		
Total		398	100.0		

**f. Provide opportunities for training on organizational capacity for chapter leaders (e. g., parliamentary procedure, fundraising, role in AFS)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	54	13.6	16.9	16.9
	Moderate priority	112	28.1	35.1	52.0
	Low priority	132	33.2	41.4	93.4
	No priority	13	3.3	4.1	97.5
	Don't know	8	2.0	2.5	100.0
	Total	319	80.2	100.0	
Missing	System	79	19.8		
Total		398	100.0		

**g. Mentoring society leaders from student subunits and chapters to prepare them for NCD and parent society positions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	74	18.6	23.0	23.0
	Moderate priority	153	38.4	47.5	70.5
	Low priority	81	20.4	25.2	95.7
	No priority	7	1.8	2.2	97.8
	Don't know	7	1.8	2.2	100.0
	Total	322	80.9	100.0	
Missing	System	76	19.1		
Total		398	100.0		

**h. Develop NCD support for the planning and hosting of the Midwest Fish & Wildlife Conference**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	84	21.1	26.2	26.2
	Moderate priority	174	43.7	54.2	80.4
	Low priority	51	12.8	15.9	96.3
	No priority	4	1.0	1.2	97.5
	Don't know	8	2.0	2.5	100.0
	Total	321	80.7	100.0	
Missing	System	77	19.3		
Total		398	100.0		

**a. Build partnerships at the regional level with other natural resource professional and scientific organizations with common goals**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	125	31.4	40.7	40.7
	Moderate priority	151	37.9	49.2	89.9
	Low priority	24	6.0	7.8	97.7
	No priority	1	.3	.3	98.0
	Don't know	6	1.5	2.0	100.0
	Total	307	77.1	100.0	
Missing	System	91	22.9		
Total		398	100.0		

**b. Provide media by which information on issues of regional importance can be shared/discussed internally among the membership (e.g., bulletin board, blog)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	83	20.9	27.0	27.0
	Moderate priority	161	40.5	52.4	79.5
	Low priority	56	14.1	18.2	97.7
	No priority	5	1.3	1.6	99.3
	Don't know	2	.5	.7	100.0
	Total	307	77.1	100.0	
Missing	System	91	22.9		
Total		398	100.0		

**c. Support adequate and stable funding at the regional level for fisheries research and management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	153	38.4	50.0	50.0
	Moderate priority	102	25.6	33.3	83.3
	Low priority	38	9.5	12.4	95.8
	No priority	7	1.8	2.3	98.0
	Don't know	6	1.5	2.0	100.0
	Total	306	76.9	100.0	
Missing	System	92	23.1		
Total		398	100.0		

**d. Support efforts to increase professional diversity (e.g., Hutton & Equal Opportunities fund)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	63	15.8	20.4	20.4
	Moderate priority	127	31.9	41.1	61.5
	Low priority	87	21.9	28.2	89.6
	No priority	25	6.3	8.1	97.7
	Don't know	7	1.8	2.3	100.0
	Total	309	77.6	100.0	
Missing	System	89	22.4		
Total		398	100.0		

**e. Support student development, collaboration, and networking online and at regional meetings**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	123	30.9	40.6	40.6
	Moderate priority	149	37.4	49.2	89.8
	Low priority	27	6.8	8.9	98.7
	No priority	2	.5	.7	99.3
	Don't know	2	.5	.7	100.0
	Total	303	76.1	100.0	
Missing	System	95	23.9		
Total		398	100.0		

**f. Provide an archive for regional fisheries history (e.g., documents, photos)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	60	15.1	19.7	19.7
	Moderate priority	107	26.9	35.1	54.8
	Low priority	117	29.4	38.4	93.1
	No priority	14	3.5	4.6	97.7
	Don't know	7	1.8	2.3	100.0
	Total	305	76.6	100.0	
Missing	System	93	23.4		
Total		398	100.0		

**g. Support adequate and stable funding at the regional level for fisheries research and management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	142	35.7	46.4	46.4
	Moderate priority	113	28.4	36.9	83.3
	Low priority	34	8.5	11.1	94.4
	No priority	10	2.5	3.3	97.7
	Don't know	7	1.8	2.3	100.0
	Total	306	76.9	100.0	
Missing	System	92	23.1		
Total		398	100.0		

**h. Create new electronic support services for Chapters (e.g., webpage templates, membership tracking, online meeting materials)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	78	19.6	25.3	25.3
	Moderate priority	158	39.7	51.3	76.6
	Low priority	68	17.1	22.1	98.7
	No priority	3	.8	1.0	99.7
	Don't know	1	.3	.3	100.0
	Total	308	77.4	100.0	
Missing	System	90	22.6		
Total		398	100.0		

**i. Create a professional travel award to assist members in attending regional and national AFS meetings**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	64	16.1	20.8	20.8
	Moderate priority	120	30.2	39.1	59.9
	Low priority	109	27.4	35.5	95.4
	No priority	10	2.5	3.3	98.7
	Don't know	4	1.0	1.3	100.0
	Total	307	77.1	100.0	
Missing	System	91	22.9		
Total		398	100.0		

**a. Visionary - providing general objectives for units (not operational activities)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	91	22.9	29.8	29.8
	Moderate priority	146	36.7	47.9	77.7
	Low priority	46	11.6	15.1	92.8
	No priority	5	1.3	1.6	94.4
	Don't know	17	4.3	5.6	100.0
	Total	305	76.6	100.0	
Missing	System	93	23.4		
Total		398	100.0		

**b. Detailed - providing specific direction to units (more operational)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High priority	65	16.3	21.5	21.5
	Moderate priority	90	22.6	29.7	51.2
	Low priority	117	29.4	38.6	89.8
	No priority	12	3.0	4.0	93.7
	Don't know	19	4.8	6.3	100.0
	Total	303	76.1	100.0	
Missing	System	95	23.9		
Total		398	100.0		

**a. Provide a glossary of terms (e.g., recruitment, stakeholder, transparency)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	22	5.5	7.2	7.2
	Very useful	70	17.6	23.0	30.3
	Somewhat useful	167	42.0	54.9	85.2
	Not useful	38	9.5	12.5	97.7
	Don't know	7	1.8	2.3	100.0
	Total	304	76.4	100.0	
Missing	System	94	23.6		
Total		398	100.0		

**b. Provide guidance to Chapter officers on how the plan can be used**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	52	13.1	17.2	17.2
	Very useful	138	34.7	45.5	62.7
	Somewhat useful	84	21.1	27.7	90.4
	Not useful	14	3.5	4.6	95.0
	Don't know	15	3.8	5.0	100.0
	Total	303	76.1	100.0	
Missing	System	95	23.9		
Total		398	100.0		

**c. Track achievements by subunits, chapters, and NCD leadership against the plan's objectives**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	37	9.3	12.3	12.3
	Very useful	128	32.2	42.4	54.6
	Somewhat useful	111	27.9	36.8	91.4
	Not useful	14	3.5	4.6	96.0
	Don't know	12	3.0	4.0	100.0
	Total	302	75.9	100.0	
Missing	System	96	24.1		
Total		398	100.0		

**d. Provide an online form for NCD subunit and chapter annual reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	41	10.3	13.5	13.5
	Very useful	151	37.9	49.8	63.4
	Somewhat useful	94	23.6	31.0	94.4
	Not useful	5	1.3	1.7	96.0
	Don't know	12	3.0	4.0	100.0
	Total	303	76.1	100.0	
Missing	System	95	23.9		
Total		398	100.0		

**e. Provide a quick reference (e.g., dashboard) of progress implementing the plan on the Division website**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	27	6.8	8.9	8.9
	Very useful	125	31.4	41.1	50.0
	Somewhat useful	125	31.4	41.1	91.1
	Not useful	17	4.3	5.6	96.7
	Don't know	10	2.5	3.3	100.0
	Total	304	76.4	100.0	
Missing	System	94	23.6		
Total		398	100.0		

**f. Revise the NCD Most Active Chapter award to reflect Chapter activities implementing the NCD plan**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely useful	18	4.5	5.9	5.9
	Very useful	92	23.1	30.3	36.2
	Somewhat useful	128	32.2	42.1	78.3
	Not useful	41	10.3	13.5	91.8
	Don't know	25	6.3	8.2	100.0
	Total	304	76.4	100.0	
Missing	System	94	23.6		
Total		398	100.0		

**a. Globalization of trade and transportation (e.g., international stock management, invasive species, disease introduction)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	84	21.1	27.9	27.9
	High attention	137	34.4	45.5	73.4
	Moderate attention	59	14.8	19.6	93.0
	Low attention	16	4.0	5.3	98.3
	No attention	4	1.0	1.3	99.7
	Don't know	1	.3	.3	100.0
	Total	301	75.6	100.0	
Missing	System	97	24.4		
Total		398	100.0		

**b. Shifting environmental pressures (e.g., climate change, emerging contaminants)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	61	15.3	20.4	20.4
	High attention	127	31.9	42.5	62.9
	Moderate attention	80	20.1	26.8	89.6
	Low attention	28	7.0	9.4	99.0
	No attention	3	.8	1.0	100.0
	Total	299	75.1	100.0	
Missing	System	99	24.9		
Total		398	100.0		

**c. Socioeconomic challenges (e.g., economic pressure, volatile markets, a transient and retiring workforce, energy resources)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	43	10.8	14.3	14.3
	High attention	101	25.4	33.6	47.8
	Moderate attention	108	27.1	35.9	83.7
	Low attention	45	11.3	15.0	98.7
	No attention	2	.5	.7	99.3
	Don't know	2	.5	.7	100.0
	Total	301	75.6	100.0	
Missing	System	97	24.4		
Total		398	100.0		

**d. Paradigm shifts in fisheries management approaches (e.g., ecosystem-based management, adaptive management)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	69	17.3	23.0	23.0
	High attention	117	29.4	39.0	62.0
	Moderate attention	86	21.6	28.7	90.7
	Low attention	25	6.3	8.3	99.0
	Don't know	3	.8	1.0	100.0
	Total	300	75.4	100.0	
Missing	System	98	24.6		
Total		398	100.0		

**e. Nature deficit syndrome (e.g., urbanization, demographics, limited outdoor experiences)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	67	16.8	22.3	22.3
	High attention	120	30.2	39.9	62.1
	Moderate attention	85	21.4	28.2	90.4
	Low attention	27	6.8	9.0	99.3
	No attention	1	.3	.3	99.7
	Don't know	1	.3	.3	100.0
	Total	301	75.6	100.0	
Missing	System	97	24.4		
Total		398	100.0		

**f. Changes in electronic communication (e.g., social media, online networking)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	35	8.8	11.7	11.7
	High attention	91	22.9	30.4	42.1
	Moderate attention	114	28.6	38.1	80.3
	Low attention	55	13.8	18.4	98.7
	No attention	4	1.0	1.3	100.0
	Total	299	75.1	100.0	
Missing	System	99	24.9		
Total		398	100.0		

**g. Recruitment and retention of employees in the fisheries field**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	46	11.6	15.4	15.4
	High attention	78	19.6	26.1	41.5
	Moderate attention	102	25.6	34.1	75.6
	Low attention	56	14.1	18.7	94.3
	No attention	16	4.0	5.4	99.7
	Don't know	1	.3	.3	100.0
	Total	299	75.1	100.0	
Missing	System	99	24.9		
Total		398	100.0		

**h. Shifts in constituencies (e.g., traditional hunter and angler base)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	42	10.6	14.0	14.0
	High attention	123	30.9	41.0	55.0
	Moderate attention	95	23.9	31.7	86.7
	Low attention	34	8.5	11.3	98.0
	No attention	4	1.0	1.3	99.3
	Don't know	2	.5	.7	100.0
	Total	300	75.4	100.0	
Missing	System	98	24.6		
Total		398	100.0		



**i. Changes in technology for fisheries assessment and management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	56	14.1	18.7	18.7
	High attention	147	36.9	49.2	67.9
	Moderate attention	73	18.3	24.4	92.3
	Low attention	20	5.0	6.7	99.0
	No attention	1	.3	.3	99.3
	Don't know	2	.5	.7	100.0
	Total	299	75.1	100.0	
Missing	System	99	24.9		
Total		398	100.0		

**j. Adequate training for young professionals in techniques needed for research and management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	91	22.9	30.3	30.3
	High attention	112	28.1	37.3	67.7
	Moderate attention	73	18.3	24.3	92.0
	Low attention	22	5.5	7.3	99.3
	No attention	2	.5	.7	100.0
	Total	300	75.4	100.0	
Missing	System	98	24.6		
Total		398	100.0		

**k. Shifting business model for professional societies and government (e.g., participatory decision-making)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Utmost attention	25	6.3	8.3	8.3
	High attention	79	19.8	26.3	34.7
	Moderate attention	119	29.9	39.7	74.3
	Low attention	55	13.8	18.3	92.7
	No attention	4	1.0	1.3	94.0
	Don't know	18	4.5	6.0	100.0
	Total	300	75.4	100.0	
Missing	System	98	24.6		
Total		398	100.0		

**Your primary employment affiliation (please click one)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Federal agency	37	9.3	12.3	12.3
	Non-government organization	5	1.3	1.7	13.9
	Private business	24	6.0	7.9	21.9
	State/Provincial agency	152	38.2	50.3	72.2
	University	73	18.3	24.2	96.4
	Other	11	2.8	3.6	100.0
	Total	302	75.9	100.0	
Missing	System	96	24.1		
Total		398	100.0		

**Are you a member of the AFS Parent Society:**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	232	58.3	77.1	77.1
	No	64	16.1	21.3	98.3
	Don't know	5	1.3	1.7	100.0
	Total	301	75.6	100.0	
Missing	System	97	24.4		
Total		398	100.0		

**Are you:**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	72	18.1	24.1	24.1
	Male	227	57.0	75.9	100.0
	Total	299	75.1	100.0	
Missing	System	99	24.9		
Total		398	100.0		

**Please indicate your age:**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	24 or under	10	2.5	3.3	3.3
	25-44	157	39.4	52.2	55.5
	45-64	125	31.4	41.5	97.0
	65 or over	9	2.3	3.0	100.0
	Total	301	75.6	100.0	
Missing	System	97	24.4		
Total		398	100.0		