7.3 Coastal Climatology for Commercial and Recreational Fishers: A Web Product

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I. INTRODUCTION

We are developing a climate information, web-based decision support tool for commercial and recreational fishers in the Carolinas, Georgia, Florida, and Alabama.

The use of climate information in decision making by commercial and recreational fishers has been very limited. There are several reasons that climate information is not currently being used by fishers. Reasons for non use include lack of knowledge of the products, lack of easy accessibility to the products, and lack of knowledge how to use the products in business decision making. This project funded by NOAA's Coastal Services Center in Charleston, SC will start to address these roadblocks to using climate information by fishers.

This project is being performed by the State Climate Offices of Georgia and Florida through the Southeast Climate Consortium. The SECC mission is to use advances in climate sciences, including improved capabilities to forecast seasonal climate, to provide scientifically sound information and decision support tools in Southeastern USA. The six member institutions of the consortium are Auburn and Florida State Universities, and the Universities of Alabama-Huntsville, Florida, Georgia, and Miami. The consortium web page is http://secc.coaps.fsu.edu/ (no "www").

2 APPROACH

Many wonderful decision support tools have been found wanting if not totally ignored by the user community because the tools did not meet their needs or expectations. Therefore it is critical that the user community is involved in the development and evaluation process.

In order that the users' needs remain the focus of this project, the University of Georgia Marine Extension Service (MarEx) conducted extensive interviews with commercial and recreational fishers, along with other coastal businesses (e.g., tour boat operators, bait shop owners, mariana owners, etc.) to determine their current climate informate uses and needs.

The purpose of these interviews was to discover how potential users are currently using climate information, the source of their information, the perceived accuracy of the information, what are the most important elements, what is missing, and how they would prefer to obtain the information.

Using the information gleamed from the interviews, a web-based coastal climate decision tool has been developed. An earlier session on Tuesday, 5.7 "Climate Assessment Tool for the Coastal Community of the Southeast U.S," outlined the product itself. This presentation will outline some of the steps involved in its development.

The final step in the development of the tool is for MarEx personnel to perform follow-up interviews and education. This will allow us to know what is working for the community and what is not working. This information from the users community will be used to improve the product.

3. RESULTS

The MarEx interviews were preceded by a PowerPoint presentation showing potential uses of climate data. The presentation emphasized the differences between climate information and weather. A two page, 14-questions, survey form was filled out by potential users

Even with a presentation outlining the differences in climate and weather information, it is clear from the survey forms that differences is not clear to many.

WHO DID WE INTERVIEW?

A total of 123 interviews were conducted in South Carolina, Georgia, and Florida. The sample was overwhelmingly male (85%) and between 45 and 65 years old (50%). Only 18% were under 35. The majority were private boat owners (43%) while 22% operated charter fishing services. However, 38% were involved in other aspects of the coastal economy including local businesses, educators, researchers, and coastal managers.

HOW OFTEN DO RESPONDENTS NEED CLIMATE DATA?

Most of the respondents (80%) need weekly updates of climate information while 17% stated that monthly updates would meet their needs.

WHAT SEASONS DO RESPONDENTS NEED CLIMATE DATA?

Not surprisingly in the deep South, the vast majority, 80%, of respondents need climate information year round. Climate information was only needed in the spring, summer and fall by 5% of the respondents while 3% only needed winter climate information.

WHERE DO RESPONDENTS OBTAIN CLIMATE INFORMATION?

More than one choice is allowed, thus the total is more than 100%.

World-Wide-Web	69%
Televison	58%
VHF-Marine Radio	37%
Radio	34%
Newspapers	26%
Subscriber Service	2%

HOW ACCURATE DO THE RESPONDENTS PERCEIVE THE CLIMATE OUTLOOKS?

Very Accurate	20%
Somewhat Accurate	68%
Not Very Accurate	7%
Not Accurate	0%
No Opinion	5%

HOW IMPORTANT IS CLIMATE INFORMATION FOR YOUR BUSINESS?

Very Important	59%
Somewhat Important	24%
Not Very Important	7%
Not Important	5%
No Opinion	5%

WHAT IS YOUR KNOWLEDGE OF CLIMATE CONDITIONS OF YOUR AREA?

Excellent Knowledge	12%
Good Knowledge	67%
Fair Knowledge	9%
Poor Knowledge	11%
No Opinion	3%

WHAT CLIMATE OR MARINE VARIABLES ARE MOST IMPORTANT FOR YOUR BUSINESS?

More than one element is allowed, thus the total is more than 100%.

Wind Speed	77%
Tides	73%
Water Temperature	72%
Wind Direction	69%
Air Temperature	52%
Rainfall	47%
Water Quality	23%
Storm Track	23%
Cloud Cover	13%
Rip Currents	10%
UV Index	8%

WHAT ARE RESPONDENTS PREFERRED WAY TO OBTAIN CLIMATE INFORMATION?

More than one choice is allowed, thus the total is more than 100%.

WWW	76%
E-mail	26%
Television	24%
Newspapers	16%
Radio	16%
Dial-a-Bouy	13%
CD	3%
FAX	2%
Text-message	2%

HOW MUCH WOULD YOU BE WILLING TO PAY FOR CLIMATE INFORMATION?

Nothing-Free	54%
$1 to $5 per year	11%
$6 to $10 per year	11%
$11 to $20 per year	16%
No Opinion	8%

OTHER REQUESTS

Other data that the community said would be useful includes: atmospheric pressure; Gulf Stream location, temperature, current; currents in general; salinity; dissolved oxygen; river discharge, moon phase and sunrise-sunset, sea state, water clarity, and profiler data.

4. The Product

The beta-version of the product may be found at www.coastalclimate.org. Comments and suggestions for improvement are requested.