Federal marine personnel needs and perception of competency in management and research hires

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Introduction—Hiring pressures

- Demand on NMFS
  - Legislative mandates
  - Retirements

- Supply from universities
  - Reduced budgets
    - University hiring freezes
  - Replacing fisheries faculty with positions tied to more lucrative research funding
Previous studies

National Marine Fisheries Service higher education priorities and programs in 2007

- Frequent vacancies for:
  - Population dynamics biologists
  - Statisticians
  - Sociologists/Anthropologists
  - Policy personnel
  - Database management personnel
Previous studies

National Marine Fisheries Service higher education priorities and programs in 2007

- Frequent vacancies for:
  - Population dynamics biologists
  - Statisticians
  - Sociologists/Anthropologists
  - Policy personnel
  - Database management personnel

- Most difficulty filling positions for:
  - Population dynamics biologists
  - Statisticians
  - Sociologists/Anthropologists
  - Economists
Previous studies

Is there a shortage of fisheries stock assessment scientists?

- Studies directed by Congress in 2007 MSA reauthorization
- Studies focused on stock assessment biologists only
- One study on demand
- One study on supply

Previous studies

Is there a shortage of fisheries stock assessment scientists?

- Demands on NMFS
  - Growing responsibilities
  - Many retirements coming up

- Supply from universities
  - Fewer faculty positions available; fewer of those in population dynamics
  - Only 7% of universities with graduate fisheries programs offer all of the NMFS essential curriculum
  - Lack of undergraduate students with strong quantitative skills
Current study

- Why did we do this?
  - Update
  - Other studies were not interactive— we wanted feedback
  - Ask not just about the pool, but the recent hires
Methods

- Invited several Deputy Directors to participate via email with list of questions
  - Science Centers (6)
  - Regional Offices (6)
  - Headquarters (1)
  - Total (13)

- Those who wished to participate were interviewed via phone

- Response Rate
  - Science Centers 66.6% (4)
  - Regional Offices 66.6% (4)
  - Headquarters 0% (0)
  - Total 61% (8)
Results
Greatest hiring needs for the agency

- Population dynamics, stock assessment and other quantitative scientists
- Economists
- Social scientists
- Also mentioned:
  - People with broad biology skill sets
  - ESA trained individuals
  - Statisticians
  - Data management
  - Information technology
Changing needs in the past five years

- Additional Region
  - Pacific Islands

- Overall need less acute
  - Funding
  - Experienced hires
  - Normal ebb and flow

- Increased Need for:
  - Social scientists
  - Economists
  - Anthropologists
  - Ecosystem modelers
  - Outreach positions

Photo by Hussain Isa
How has the pool of applicants changed?

Larger Pool
• More interest in working for the federal government
• State agencies cutting back

Smaller Pool
• People shifting more towards policy
• People becoming too specialized
• Demand for people with specific skill sets has increased

Pool Unchanged
Location, Location, Location

- Cost of living
  - West coast
  - Hawaii

- Reputation of location

- Amenities of location

- Ability for family to get jobs
Satisfaction with and competency of recent hires

- Overall satisfaction and perceived competency is the same or has increased
Satisfaction with and competency of recent hires

- Overall satisfaction and perceived competency is the same or has increased

Why?

- System filters out “less qualified”
- People hired to fit specific, advertised needs
Skills needing improvement in new hires

- Communication skills
  - Writing
  - Communicating importance of work
  - Public interaction

- Experience
  - Execution of school skills
  - Judgment
  - Political sensitivities
Conclusions

• Hiring needs are consistent with previous studies
  • Population dynamics biologists
  • Sociologists/Anthropologists
  • Economists

• A shortage of applicants continues for highly quantitative positions

• Overall, NMFS personnel are satisfied with their hires

• Need for employees in policy and science arenas with:
  • Experience
  • Ability to work and communicate with the public
Questions?