

Appendix A: Results of Local Government Leader Survey on Michigan's Coastal Dunes

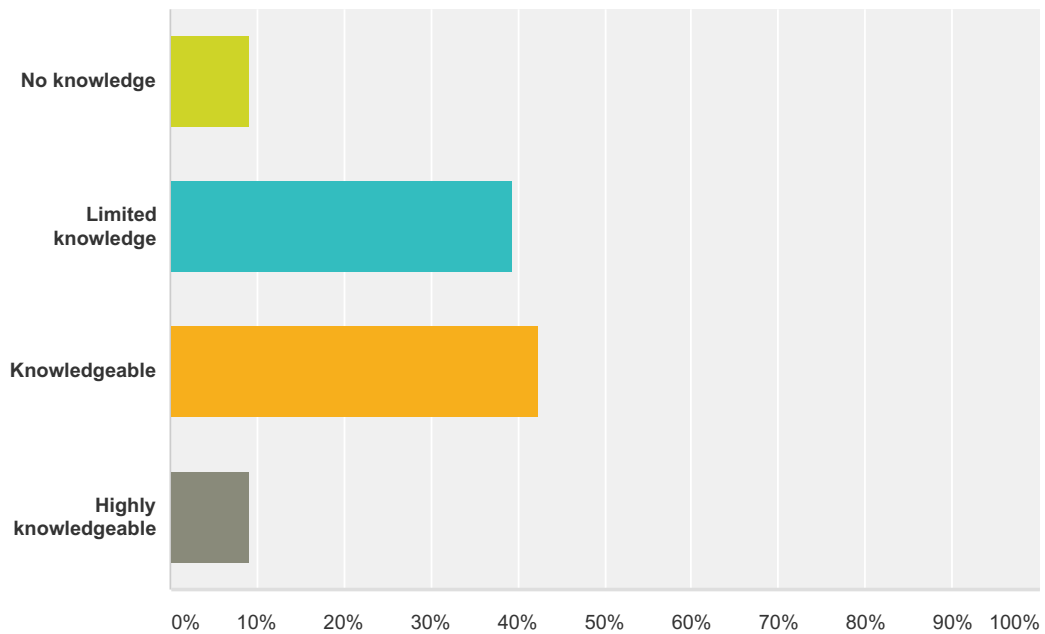
Bringing the Latest Science to the Management of Michigan's Coastal Dunes



Michigan Environmental Council
May 2015

Q1 What is your level of knowledge regarding areas within your local jurisdiction that are officially designated "critical dunes" (as defined by and regulated by the Michigan Department of Environmental Quality (MDEQ) under Part 353 of the Natural Resources and Environmental Protection Act (NREPA)?

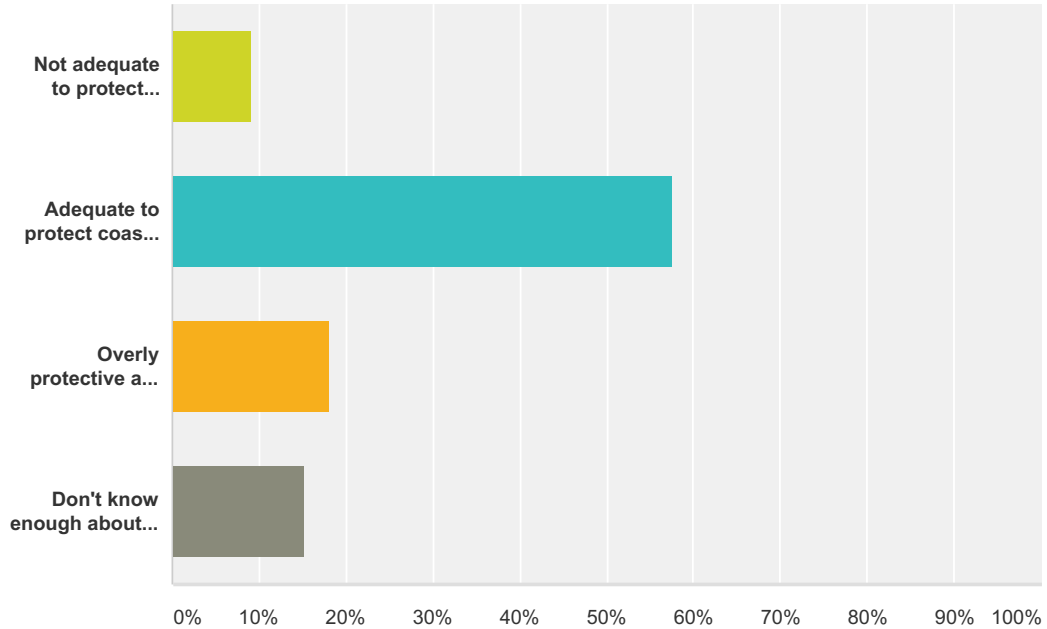
Answered: 33 Skipped: 0



| Answer Choices | Responses |
|----------------------|-----------|
| No knowledge | 9.09% 3 |
| Limited knowledge | 39.39% 13 |
| Knowledgeable | 42.42% 14 |
| Highly knowledgeable | 9.09% 3 |
| Total | 33 |

Q2 In your opinion, how effective is Michigan's current system of management and stewardship of the state's overall collection of coastal sand dune resources?

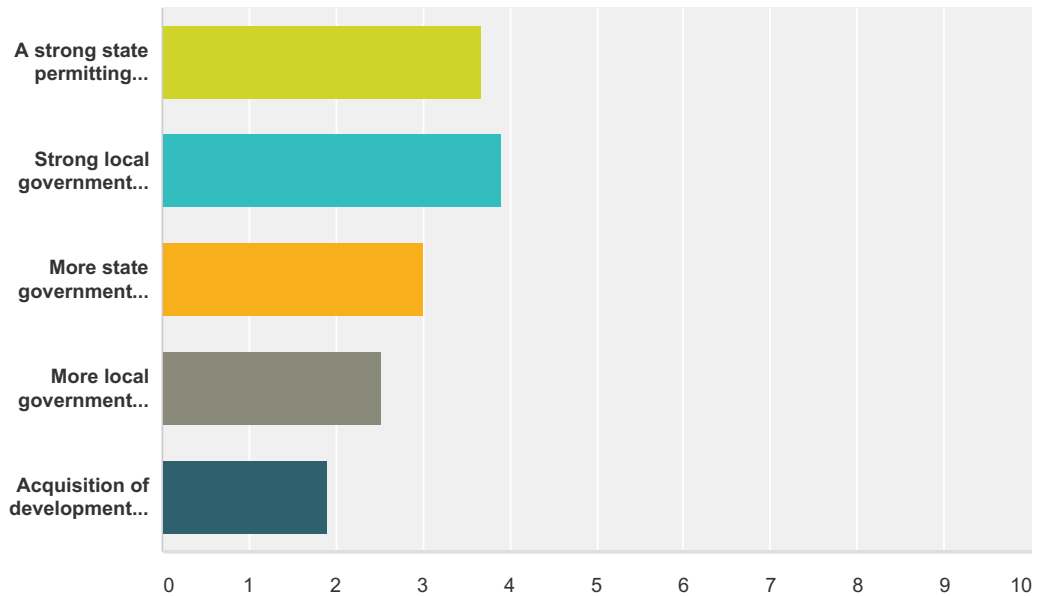
Answered: 33 Skipped: 0



| Answer Choices | Responses |
|--|-----------|
| Not adequate to protect coastal dunes from impairment and destruction | 9.09% 3 |
| Adequate to protect coastal dunes for current and future generations | 57.58% 19 |
| Overly protective and too restrictive for coastal dune property owners | 18.18% 6 |
| Don't know enough about the program to answer | 15.15% 5 |
| Total | 33 |

Q3 How effective do you believe each of the following programs would be in protecting Michigan's coastal dune resources. Please rank 1-5, with 1 being most effective and 5 being least effective. Drag and drop the following choices in order of preference, with your top choice in the first position.

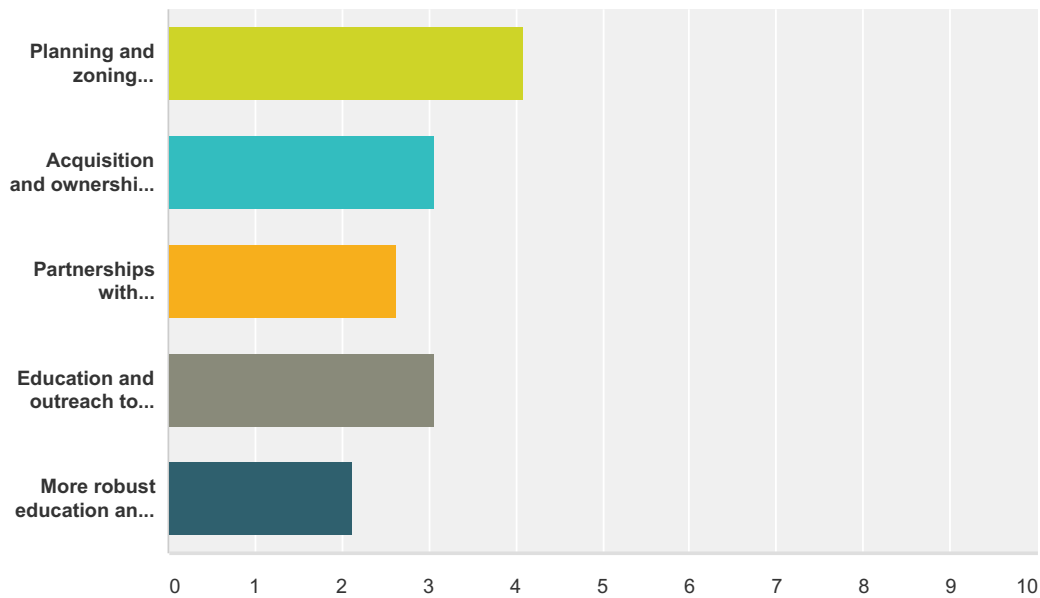
Answered: 31 Skipped: 2



| | 1 | 2 | 3 | 4 | 5 | Total | Score |
|--|--------------|--------------|-------------|--------------|--------------|-------|-------|
| A strong state permitting program to regulate development in coastal dunes | 29.03% 9 | 38.71% 12 | 9.68% 3 | 16.13% 5 | 6.45% 2 | 31 | 3.68 |
| Strong local government zoning to regulate development in coastal dunes | 41.94% 13 | 25.81% 8 | 16.13% 5 | 12.90% 4 | 3.23% 1 | 31 | 3.90 |
| More state government ownership of coastal dunes | 16.13% 5 | 19.35% 6 | 29.03% 9 | 19.35% 6 | 16.13% 5 | 31 | 3.00 |
| More local government ownership of coastal dunes | 6.45% 2 | 9.68% 3 | 29.03% 9 | 38.71% 12 | 16.13% 5 | 31 | 2.52 |
| Acquisition of development rights in coastal dunes | 6.45% 2 | 6.45% 2 | 16.13% 5 | 12.90% 4 | 58.06% 18 | 31 | 1.90 |

Q4 What do you think is the most useful tool for local units of government in protecting Michigan's system of coastal sand dunes? Please rank 1-5, with 1 being most important, and 5 being least important. Drag and drop the following choices in order of preference, with your top choice in the first position.

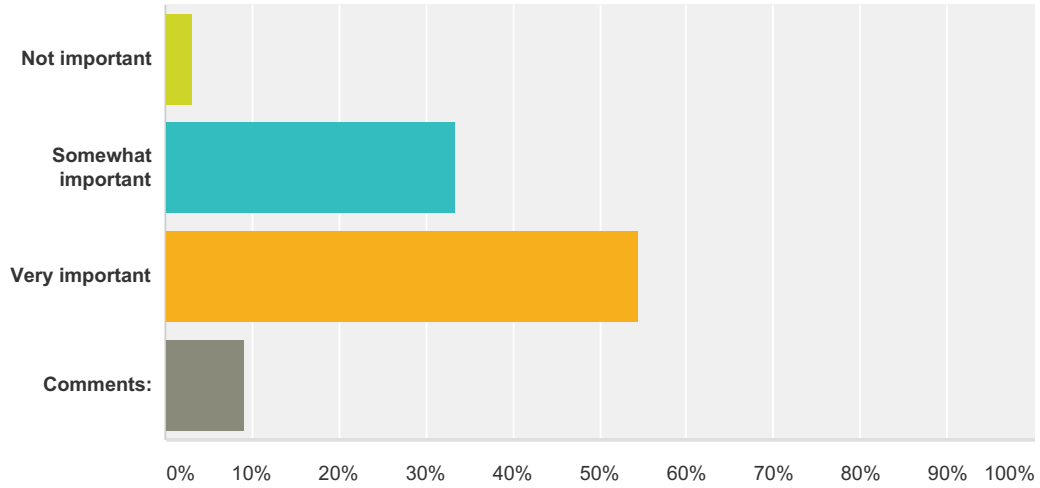
Answered: 30 Skipped: 3



| | 1 | 2 | 3 | 4 | 5 | Total | Score |
|--|--------------|-------------|-------------|--------------|--------------|-------|-------|
| Planning and zoning regulation | 50.00% 15 | 30.00% 9 | 10.00% 3 | 0.00% 0 | 10.00% 3 | 30 | 4.10 |
| Acquisition and ownership of coastal dunes | 20.00% 6 | 20.00% 6 | 23.33% 7 | 20.00% 6 | 16.67% 5 | 30 | 3.07 |
| Partnerships with non-governmental organizations to secure development rights in coastal dunes | 0.00% 0 | 26.67% 8 | 30.00% 9 | 23.33% 7 | 20.00% 6 | 30 | 2.63 |
| Education and outreach to owners and managers of coastal dune properties | 20.00% 6 | 16.67% 5 | 20.00% 6 | 36.67% 11 | 6.67% 2 | 30 | 3.07 |
| More robust education and local volunteer stewardship | 10.00% 3 | 6.67% 2 | 16.67% 5 | 20.00% 6 | 46.67% 14 | 30 | 2.13 |

Q5 How important do you feel Michigan's system of coastal sand dunes is to local economies?

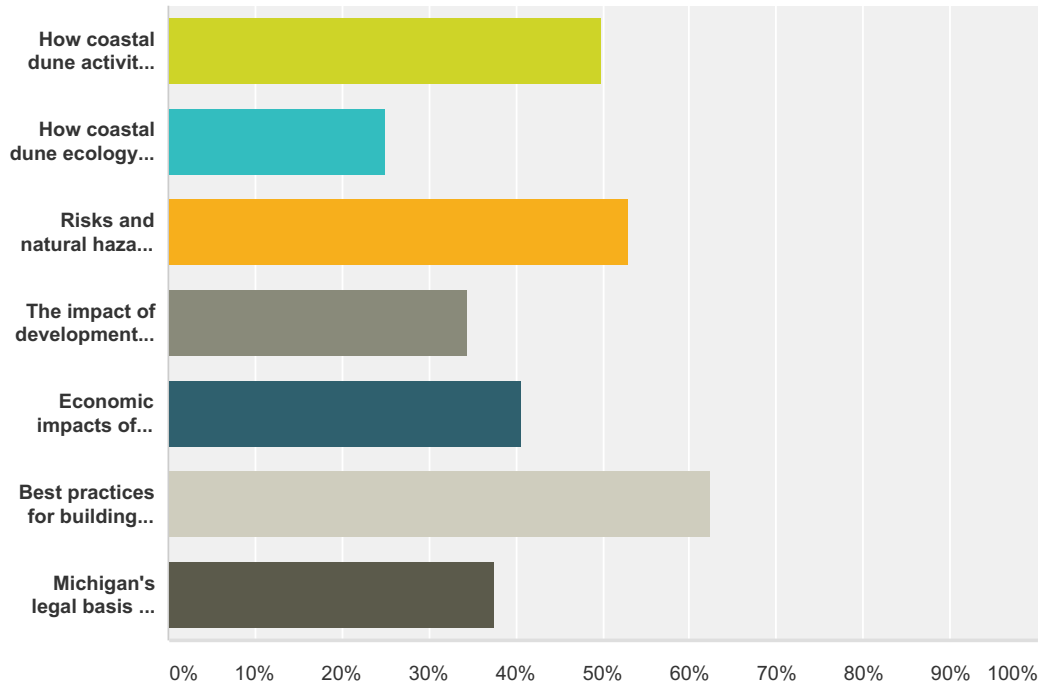
Answered: 33 Skipped: 0



| Answer Choices | Responses |
|--------------------|-----------|
| Not important | 3.03% 1 |
| Somewhat important | 33.33% 11 |
| Very important | 54.55% 18 |
| Comments: | 9.09% 3 |
| Total | 33 |

Q6 What types of information do you think local government leaders most need in order to better protect Michigan's system of coastal sand dunes? Please choose your top three.

Answered: 32 Skipped: 1



| Answer Choices | Responses |
|--|-----------|
| How coastal dune activity and sand movement is impacted by building and development | 50.00% 16 |
| How coastal dune ecology (wildlife and plants, such as habitat fragmentation and introduction of invasive species) is impacted by building and development | 25.00% 8 |
| Risks and natural hazards related to building and development in coastal dunes | 53.13% 17 |
| The impact of development and/or protection of coastal dunes on regional property values | 34.38% 11 |
| Economic impacts of tourism and recreation associated with coastal dune landscapes | 40.63% 13 |
| Best practices for building and developing in coastal dunes | 62.50% 20 |
| Michigan's legal basis for regulating development in coastal dunes | 37.50% 12 |
| Total Respondents: 32 | |

Q7 Please provide any additional viewpoints you have on Michigan's system of coastal sand dunes.

Answered: 6 Skipped: 27

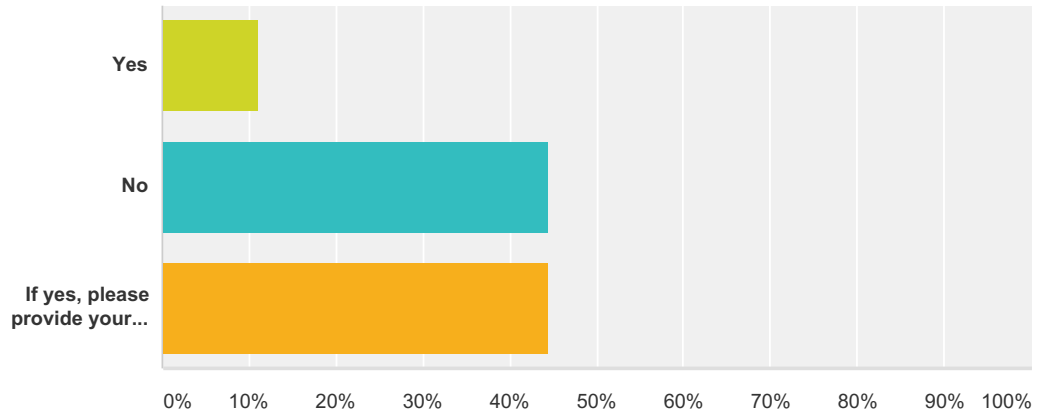
Q8 If you would be interested in participating in a brief phone conversation regarding your viewpoints on topics noted in any of these survey questions, please provide your contact information here.

Answered: 7 Skipped: 26

| Answer Choices | Responses | |
|-------------------|-----------|---|
| Name | 100.00% | 7 |
| Company | 85.71% | 6 |
| Address | 71.43% | 5 |
| Address 2 | 28.57% | 2 |
| City / Town | 71.43% | 5 |
| State / Province | 71.43% | 5 |
| ZIP / Postal Code | 71.43% | 5 |
| Country | 71.43% | 5 |
| Email | 71.43% | 5 |
| Phone | 100.00% | 7 |

Q9 Please indicate whether or not you are interested in receiving a project update. If you answer "yes," please provide your name, township/village/city or county, and email address in the comment box.

Answered: 27 Skipped: 6



| Answer Choices | Responses | |
|--|-----------|-----------|
| Yes | 11.11% | 3 |
| No | 44.44% | 12 |
| If yes, please provide your name, township/village/city/county and email address here: | 44.44% | 12 |
| Total | | 27 |

Note: The results for the ranking questions provide an average ranking that shows the answer choices which were the highest ranked overall.

Question #1: What is your level of knowledge regarding areas within your local jurisdiction that are officially designated “critical dunes” (as defined by and regulated by the Michigan Department of Environmental Quality (MDEQ) under Part 353 of the Natural Resources and Environmental Protection Act (NREPA)?

- No knowledge
- Limited knowledge
- Knowledgeable
- Highly knowledgeable

Summary of results: Respondents were almost evenly divided between feeling they were “knowledgeable” (14) and or had “limited knowledge (13).” There was also an even split between “no knowledge” and “highly knowledgeable” with three in each category.

Conclusion: There is considerable diversity of knowledge among local governmental leaders regarding Michigan’s coastal dune system.

Question #2: In your opinion, how effective is Michigan’s current system of management and stewardship of the state’s overall collection of coastal sand dune resources?

- Not adequate to protect coastal dunes from impairment and destruction
- Adequate to protect coastal dunes for current and future generations
- Overly protective and too restrictive for coastal dune property owners
- Don’t know enough about the program to answer

Summary of results: A significant majority of respondents indicated they felt that Michigan’s current management system was adequate to protect coastal dunes for current and future generations (19). Six felt it was overly protective and too restrictive, five did not know enough about the program, and three felt the management system was not adequate to protect coastal dunes from impairment and destruction.

Conclusion: The majority of local government leaders believe the current management system for coastal dunes is effective.

Question #3: How effective do you believe each of the following programs would be in protecting Michigan’s coastal dune resources? Please rank 1-5, with 1 being most effective and 5 being least effective.

- A strong state permitting program to regulate development in coastal dunes.
- Strong local government zoning to regulate development in coastal dunes.
- More state government ownership of coastal dunes.
- More local government ownership of coastal dunes.
- Acquisition of development rights in coastal dunes.

- Planning and zoning regulation
- Acquisition and ownership of coastal dunes

Summary of results: The majority of respondents chose strong local government zoning as the most effective program for protecting coastal dunes (3.90), followed by a strong state permitting program regulating development in coastal dunes (3.68). More state government ownership was next with 3.00, then more local government ownership of coastal dunes at 2.52. Acquisition of development rights in coastal dunes was the last choice, ranking 1.90.

Conclusion: While most local governmental leaders believe that local zoning is the most effective way to protect coastal dunes, interest in having a strong state permitting program followed closely. Conversely, local governmental leaders preferred more state ownership to local ownership. Based on discussions with several local government officials in conjunction with manual entry of their surveys, it seems possible that acquisition of development rights was not well understood.

Question #4: What do you think is the most useful tool for local units of government in protecting Michigan’s system of coastal sand dunes? Please rank 1-5, with 1 being most important, and 5 being least important.

- Planning and zoning regulation
- Acquisition and ownership of coastal dunes
- Partnerships with non-governmental organizations to secure development rights in coastal dunes
- Education and outreach to owners and managers of coastal dunes properties
- More robust education and local volunteer stewardship

Summary of results: Planning and zoning regulation was the top overall choice by local governmental leaders with 4.10. This was followed by a tie between acquisition and ownership of coastal dunes (3.07) and education and outreach to owners and managers of coastal dune properties (3.07). Partnerships to secure development rights followed with 2.63. More robust education and local volunteer stewardship was deemed the least useful tool at 2.13.

Conclusion: The top choice, planning and zoning regulation, is consistent with the answers to question three.

Question #5: How important do you feel Michigan’s system of coastal sand dunes is to local economies?

- Not important
- Somewhat important
- Very important

Summary of results: Local governmental leaders indicated by a significant majority, more than half, that they felt Michigan’s coastal dunes were “very important” to local economies (18 out

of 33). This was followed somewhat closely by the “somewhat important” choice which was chosen by 11 of the 33 respondents. Only one respondent indicated that the coastal dunes were not important to the local economies.

Conclusion: Local government leaders value greatly the contribution coastal dunes offer to the local economies.

Question #6: What types of information do you think local government leaders most need in order to better protect Michigan’s system of coastal sand dunes? Please choose your top three.

- How coastal dune activity and sand movement is impacted by building and development
- How coastal dune ecology (wildlife and plants, such as habitat fragmentation and introduction of invasive species) is impacted by building and development
- Risks and natural hazards related to building and development in coastal dunes
- The impact of development and/or protection of coastal dunes on regional property values
- Economic impacts of tourism and recreation associated with coastal dune landscapes
- Best practices for building and developing coastal dunes
- Michigan’s legal basis for regulating development in coastal dunes

Summary of results: The top three types of information most needed by local government leaders to better protect Michigan’s coastal dunes are best practices for building and developing coastal dunes (20), risks and natural hazards related to building and development in coastal dunes (17), and how coastal dune activity and sand movement is impacted by building and development (16). These top three were followed by economic impacts of tourism and recreation associated with coastal dune landscapes (13), Michigan’s legal basis for regulating development in coastal dunes (12), and the impact of development and/or protection of coastal dunes on regional property values (11). Determined to be the least needed type of information was how coastal dune ecology is impacted by building and development (5).

Conclusion: The most needed types of information by local government leaders are associated with the practical aspects of development in coastal dunes.

Question #7: Please provide any additional viewpoints you have on Michigan’s system of coastal dunes.

Respondents provided five additional comments on Michigan’s coastal dunes: raising the issue of timely response on permits from the DEQ, ensuring protection of the dunes, concerns for over-regulation, the positive and negative impact of dunes vs. development on the local economy, and the need for assistance from the state on lakeshore erosion problems.

Seven respondents indicated they would participate in a telephone interview to answer additional questions:

1. Why are you interested in participating in a phone interview?

2. What additional viewpoints or information do you wish to provide?
3. Do you wish to explain or elaborate on any of your answers?
4. Is there anything else you would to say?
5. What dune-related issues or concerns do you hear most about from community members?
6. How have dunes in your community changed in the last 20-30 years? What do you anticipate for the dunes over the next 20-30 years?
7. Do you think of the challenge of managing dune development primarily as protecting the scenic views, or about limiting the risks of building and living in an unstable environment?

The majority, (six of the seven) indicated they participated in the phone interview because of the topic – they felt that dunes were important. One participated in order to “help out.” Six interviewees offered their viewpoints on the value of the dunes to their local area and the state, area acquisition projects, and their concerns for continued degradation of the coastal dune system. One township supervisor noted he had changed his mind during the interview – he had previously considered the dunes on a parcel level and had not considered them as an entire dune system. He said that changed his views toward increased protection. Another township supervisor noted how since the 2012 amendments, a critical dune permit had been issued for a home in front of lakeward dunes, blocking the view of an earlier residential development built behind the lakeward dunes. One interviewee expressed a viewpoint favoring the rights of property owners. He felt that the property owners had paid a high cost for their property and taxes, and should be able to obtain more timely decisions on permits. Dune related issues and concerns of the six interviewees included: wealthy property owners having more opportunity for permit approvals and both sides of the regulation issue – frustrated property owners vs. area residents worried about additional dune development. The interviewee who expressed viewpoints supporting private property rights said that concerns he heard were that decisions took too long, DEQ officials were “nitpicking” and more interested in “power.” He also felt that the future held more regulations on building in the dunes, less development and a lower tax base, which was not desirable in his opinion.

Overall Survey and Interview Conclusions

The survey and interviews indicate there is great diversity in the level of knowledge of local government leaders regarding Michigan's coastal dunes. The majority believe the current management system is effective at protecting the coastal dune system. Local government leaders believe that local government, more than state government, is the most effective at protecting the dunes, but prefer state acquisition over local acquisition. Along the same lines, the officials feel that planning and zoning is the most effective tool, followed by acquisition and partnerships. Education and stewardship is considered a low priority. All but one of the 33 local government leaders who responded to the survey indicated that Michigan's coastal dunes are either "very important" or "somewhat important" to local economies. The most needed types of information by local government leaders are associated with the practical aspects of development in coastal dunes, and to a lesser extent, the economic factors connecting tourism with coastal dunes. The interviews with survey respondents indicated a strongly held minority viewpoint that the dunes merited more stringent management and protection. See the Appendix for the full survey results.