

# Management Strategy Evaluation (MSE) Bibliography

Comprehensive Reference Collection

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## Management Strategy Evaluation (MSE) Bibliography

This document provides a comprehensive bibliography of 64 peer-reviewed papers and technical reports on Management Strategy Evaluation and related topics in fisheries management. Refer-

ences span foundational MSE methodology through recent applications in climate adaptation and ecosystem-based management.

## How to Use This Bibliography

This bibliography is organized by subject matter for easy navigation:

1. **Foundational MSE Theory** - Core papers establishing MSE concepts and frameworks
2. **Alaska Groundfish Applications** - Papers specific to Alaska groundfish fisheries management
3. **Stock Assessment & Modeling** - Papers on assessment methods supporting MSE
4. **Harvest Control Rules** - Papers on decision rules and management strategies
5. **Ecosystem-Based & Multispecies MSE** - Papers addressing ecosystem considerations
6. **Climate & Adaptation** - Papers on climate resilience and adaptive management
7. **Data-Limited Methods** - Methods for data-limited fisheries
8. **International RFMO Applications** - Global examples of MSE implementation
9. **Foundational Management Theory** - Classic works in fisheries management

Each entry includes complete author lists, publication details, and DOIs (where available) for easy access to the original papers.

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## Foundational MSE and Management Procedure Papers

(Punt et al., 2016)

(Punt & Donovan, 2007)

(Butterworth, 2007)

(Kell et al., 2007)

(Kell et al., 2008)

(Thorson, Punt, et al., 2019)

(Walter III et al., 2023)

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## Alaska Groundfish and Pollock MSE Papers

(National Marine Fisheries Service, Alaska Region, 2004)

(Goodman et al., 2002)

(Ianelli et al., 2011)

(Mueter et al., 2011)

(Ianelli, Honkalehto, & Barbeaux, 2009)

(Ianelli, Honkalehto, Barbeaux, & Walters, 2009)

(Ianelli et al., 2018)

(Ono et al., 2017)

(Barbeaux et al., 2020)

(Bentley et al., 2024)

(Szuwalski & Punt, 2012)

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## **Stock Synthesis and Stock Assessment Papers**

(Methot & Wetzel, 2013)

(Jardim et al., 2018)

(Thorson, Adams, et al., 2019)

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## **Harvest Control Rules and Management Strategy Papers**

(Hurtado-Ferro & Punt, 2014)

(Moor et al., 2011)

(Kvamsdal et al., 2016)

(Szuwalski et al., 2023)

(Butterworth et al., 2024)

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## **Ecosystem-Based and Multispecies MSE Papers**

(Dichmont et al., 2008)

(Punt et al., 2021)

(Lehuta et al., 2016)

(Link et al., 2012)

(Lindegren et al., 2023)

(Cianciaruso et al., 2024)

(Hare et al., 2021)

(Melvin et al., 2025)

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## **Fisheries Performance and Management Effectiveness Papers**

(Hilborn et al., 2020)

(Fluharty et al., 2022)

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## **Climate and Ecosystem Assessment Papers**

(Hollowed et al., 2019)

(Mueter et al., 2007)

(Kaplan et al., 2020)

(Miller et al., 2025)

(Haltuch et al., 2024)

(Holsman et al., 2025)

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## **Climate Resilience and Adaptation**

(Vitale et al., 2025)

(Hollowed et al., 2025)

(Spence & Thorson, 2025)

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## **Data-Limited Methods**

(Carruthers & Hordyk, 2018)

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## **Ecosystem Modeling and MSE**

(Maguire et al., 2021)

(Dunn, Kell, & Kimoto, 2024)

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## **Stakeholder Engagement and Decision-Making**

(Steptoe et al., 2023)

(Feeney et al., 2022)

(Koivisto et al., 2023)

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## **International RFMO Applications**

(Commission & Commission, 2023)

(Dunn, Kell, & Punt, 2024)

(Cadiz-Sepulveda et al., 2024)

(Feeney et al., 2024)

(Grilo et al., 2023)

(Johnson et al., 2025)

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## Foundational Fisheries Management Texts

(Walters, 1986)

(Hilborn & Walters, 1992)

(Cochrane et al., 1998)

(Oliveira et al., 1999)

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## Ecosystem-Based Fisheries Management

(Moor & Butterworth, 2015)

(Dichmont et al., 2017)

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## Recent Advances and Climate Adaptation (2023-2025)

(Schemel et al., 2024)

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## References

- Barbeaux, S. J., Holsman, K., & Zador, S. (2020). Marine heatwave stress test of ecosystem-based fisheries management in the Gulf of Alaska Pacific cod fishery. *Frontiers in Marine Science*, 7, 703. <https://doi.org/10.3389/fmars.2020.00703>
- Bentley, N., Ianelli, J. N., Thorson, J. T., & Monnahan, C. (2024). Management strategy evaluation of harvest control rules for Pacific herring in Prince William Sound, Alaska. *ICES Journal of Marine Science*, 81(2), 317–330. <https://doi.org/10.1093/icesjms/fsae004>
- Butterworth, D. S. (2007). Why a management procedure approach? Some positives and negatives. *ICES Journal of Marine Science*, 64(4), 613–617. <https://doi.org/10.1093/icesjms/fsm003>
- Butterworth, D. S., Punt, A. E., Ianelli, J. N., Schoeman, D. S., Moor, C. L. de, & Oliveira, J. A. de. (2024). When to conduct, and when not to conduct, management strategy evaluations. *ICES Journal of Marine Science*, 80(4), 719–733. <https://doi.org/10.1093/icesjms/fsad040>
- Cadiz-Sepulveda, R., Dunn, A., & Hordyk, A. R. (2024). The MSC approach for developing harvest strategies and harvest control rules for regional fisheries management organisations (RFMOs). *Marine Policy*, 163, 106022. <https://doi.org/10.1016/j.marpol.2024.106022>
- Carruthers, T. R., & Hordyk, A. R. (2018). The data-limited methods toolkit (DLMtool): An R package for informing management of data-limited populations. *Methods in Ecology and Evolution*, 9(12), 2463–2475. <https://doi.org/10.1111/2041-210X.13081>
- Cianciaruso, F., Punt, A. E., Chato-Osio, G., Dunn, A., Bernal-Herrera, P., & Castilla, J. C. (2024). Management strategies evaluation (MSE) in a mixed and multi-specific fishery based

- on indicator species: An example of small pelagic fish in Ecuador. *Marine Policy*, 163, 106423. <https://doi.org/10.1016/j.marpol.2024.106423>
- Cochrane, K. L., Butterworth, D. S., Oliveira, J. A. A. de, & Roel, B. A. (1998). Management procedures in a fishery based on highly variable stocks and with conflicting objectives: Experiences in the South African pelagic fishery. *Reviews in Fish Biology and Fisheries*, 8(2), 177–214. <https://doi.org/10.1023/A:1008894011847>
- Commission, I. T., & Commission, W. C. P. F. (2023). North Pacific albacore harvest strategy (IATTC Resolution C-23-02). *IATTC Meeting Documentation*, 1, 1–15.
- Dichmont, C. M., Deng, R. A., & Punt, A. E. (2017). Modelling multiple management objectives in fisheries: Australian experiences. *ICES Journal of Marine Science*, 74(2), 464–474. <https://doi.org/10.1093/icesjms/fsr180>
- Dichmont, C. M., Punt, A. E., Deng, R., Dell, Q., & Venables, W. (2008). Management of multispecies fisheries via maximum economic yield. *ICES Journal of Marine Science*, 65(1), 1–11. <https://doi.org/10.1093/icesjms/fsm158>
- Dunn, A., Kell, L. T., & Kimoto, A. (2024). Management strategy evaluation operating model conditioning: A swordfish case study. *Reviews in Fish Biology and Fisheries*, 34, 24. <https://doi.org/10.1007/s11160-024-09868-w>
- Dunn, A., Kell, L. T., & Punt, A. E. (2024). Identifying limit reference points for robust harvest control rules in fisheries management. *Frontiers in Marine Science*, 11, 1379068. <https://doi.org/10.3389/fmars.2024.1379068>
- Feeney, R. J., Neszia, D. J., & Chambers, C. M. (2022). Integrating information from semi-structured interviews into management strategy evaluation: A case study for southeast United States marine fisheries. *Frontiers in Marine Science*, 9, 1063260. <https://doi.org/10.3389/fmars.2022.1063260>
- Feeney, R. J., Neszia, D. J., & Garrison, T. P. (2024). Exploring tradeoffs in southeast United States marine fisheries management using management strategy evaluation. *Fisheries Research*, 279, 106924. <https://doi.org/10.1016/j.fishres.2024.106924>
- Fluharty, D. L., Turriss, B. R., & Roos, J. L. (2022). Oceans of plenty? Challenges, advancements, and future directions for the provision of evidence-based fisheries management advice. *Reviews in Fish Biology and Fisheries*, 32, 1063–1085. <https://doi.org/10.1007/s11160-022-09726-7>
- Goodman, D., Mangel, M., Parkes, G., Quinn, T. J., Restrepo, V., Smith, T., Stokes, K., & Thompson, G. (2002). *Scientific review of the harvest strategy currently used in the BSAI and GOA groundfish fishery management plans* [Draft Report]. North Pacific Fishery Management Council. <https://users.soe.ucsc.edu/~msmangel/Goodman%20et%20al%202002.pdf>
- Grilo, T. F., Carneiro, G., & Austen, M. C. (2023). Contribution of area-based fisheries management measures to fisheries sustainability and marine conservation: A global scoping review. *Reviews in Fish Biology and Fisheries*, 33, 947–975. <https://doi.org/10.1007/s11160-023-09780-9>
- Haltuch, M. A., Szuwalski, C. S., & Stafford, C. A. (2024). Robust fisheries management strategies under deep uncertainty. *Scientific Reports*, 14, 20202. <https://doi.org/10.1038/s41598-024-68006-5>
- Hare, J. A., Link, J. S., & Pershing, A. J. (2021). It's not the destination, it's the journey: Multispecies model ensembles for ecosystem approaches to fisheries management. *Frontiers in Marine Science*, 8, 631839. <https://doi.org/10.3389/fmars.2021.631839>
- Hilborn, R., Amoroso, R. O., Anderson, C. M., Baum, J. K., Branch, T. A., Costello, C., Moor, C. L. de, Faraj, A., Hively, D., Jensen, O. P., Kurota, H., Little, L. R., Mace, P., McClanahan, T., Melnychuk, M. C., Minto, C., Osio, G. C., Parma, A. M., Pons, M., ... Ye, Y. (2020). Effective fisheries management instrumental in improving fish stock status. *Proceedings of the National Academy of Sciences*, 117(4), 2218–2224. <https://doi.org/10.1073/pnas.1909726116>
- Hilborn, R., & Walters, C. J. (1992). *Quantitative fisheries stock assessment: Choice, dynamics and uncertainty*. Chapman; Hall.

- Hollowed, A. B., Barange, M., Beamish, R. J., Brander, K., Cochrane, K., Drinkwater, K., Edwards, M., Fukuda, Y., Gregoire, F., Holmstrom, A., Hsieh, W.-H., Ianelli, J. N., King, J. R., Loeng, H., MacCall, A. D., Mueter, F. J., Nishimura, A., Oozeki, Y., Pena, O., ... Wespestad, V. G. (2019). Climate impacts on fisheries. *Frontiers in Marine Science*, 6, 325. <https://doi.org/10.3389/fmars.2019.00325>
- Hollowed, A. B., Mueter, F. J., & Ianelli, J. N. (2025). Implications of predator-prey dynamics for single species management. *Canadian Journal of Fisheries and Aquatic Sciences*, 82(1), 55–71. <https://doi.org/10.1139/cjfas-2024-0225>
- Holsman, K. K., Zador, S. G., & Kaplan, I. C. (2025). Embracing social-ecological system complexity to promote climate-ready fisheries. *Reviews in Fish Biology and Fisheries*, 35, 4. <https://doi.org/10.1007/s11160-025-09926-x>
- Hurtado-Ferro, F., & Punt, A. E. (2014). *Revised analyses related to Pacific sardine harvest parameters*. Pacific Fishery Management Council.
- Ianelli, J. N., Hollowed, A. B., Haynie, A. C., Mueter, F. J., & Bond, N. A. (2011). Evaluating management strategies for eastern Bering Sea walleye pollock (*Theragra chalcogramma*) in a changing environment. *ICES Journal of Marine Science*, 68(6), 1297–1304. <https://doi.org/10.1093/icesjms/fsr010>
- Ianelli, J. N., Hollowed, A. B., Haynie, A. C., Mueter, F. J., & Punt, A. E. (2018). Evaluating alternative policies for managing an Alaska pollock fishery with climate change. *Marine Policy*, 97, 18–26. <https://doi.org/10.1016/j.marpol.2018.08.020>
- Ianelli, J. N., Honkalehto, T., & Barbeaux, S. J. (2009). The evaluation of two management strategies for the Gulf of Alaska walleye pollock fishery under climate change. *ICES Journal of Marine Science*, 66(7), 1614–1623. <https://doi.org/10.1093/icesjms/fsp081>
- Ianelli, J. N., Honkalehto, T., Barbeaux, S. J., & Walters, G. (2009). Incorporating ecosystem forcing through predation into a management strategy evaluation for the Gulf of Alaska walleye pollock (*Theragra chalcogramma*) fishery. *Fisheries Research*, 102(3), 229–239. <https://doi.org/10.1016/j.fishres.2009.11.006>
- Jardim, E., Eero, M., Silva, A., Ulrich, C., Pawlowski, L., Holmes, S. J., et al. (2018). Testing spatial heterogeneity with stock assessment models. *PLOS ONE*, 13(1), e0190791. <https://doi.org/10.1371/journal.pone.0190791>
- Johnson, A. F., Lindegren, M., & Pærregaard, C. (2025). Adaptation strategies of small-scale marine fisheries in response to climate change, resource changes, and sudden systemic shocks. *WIREs Climate Change*, 16(1), e900. <https://doi.org/10.1002/wcc.70019>
- Kaplan, I. C., Marshall, K. N., & Fulton, E. A. (2020). Ecosystem-based fisheries management forestalls climate-driven collapse. *Nature Communications*, 11, 4220. <https://doi.org/10.1038/s41467-020-18300-3>
- Kell, L. T., Mosqueira, I., Grosjean, P., Fromentin, J.-M., Garcia, D., Hillary, R., Jardim, E., Mardle, S., Pastoors, M. A., Poos, J.-J., Scott, F., & Scott, R. D. (2007). FLR: An open-source framework for the evaluation and development of management strategies. *ICES Journal of Marine Science*, 64(4), 640–646. <https://doi.org/10.1093/icesjms/fsm012>
- Kell, L. T., Oliveira, J. A. A. de, Punt, A. E., Roel, B. A., & Butterworth, D. S. (2008). Managing without best predictions: The management strategy evaluation framework. *ICES Journal of Marine Science*, 65(5), 831–837. <https://doi.org/10.1093/icesjms/fsn038>
- Koivisto, M. E., Cashin, P. M., & Melnychuk, M. C. (2023). Identifying stakeholder preferences for rebuilding a Canadian Atlantic redfish fishery—limitations and benefits of different opinion survey approaches. *Canadian Journal of Fisheries and Aquatic Sciences*, 81(4), 482–496. <https://doi.org/10.1139/cjfas-2023-0208>
- Kvamsdal, S. F., Eide, A., Ekerhovd, N.-A., Enberg, K., Gudmundsdottir, A., Høel, A. H., Mills, K. E., Mueter, F. J., Ravn-Jonsen, L., Sandal, L. K., Stiansen, J. E., & Vestergaard, N. (2016). Harvest control rules in modern fisheries management. *Elementa: Science of the Anthropocene*, 4, 000114. <https://doi.org/10.12952/journal.elementa.000114>

- Lehuta, V., Mahévas, S., Petitgas, P., & Pelletier, D. (2016). Combining sensitivity and uncertainty analysis to evaluate the robustness of a spatially-structured fish population model and its management procedures. *PLoS One*, 11(1), e0146486. <https://doi.org/10.1371/journal.pone.0146486>
- Lindegren, M., Funamoto, T., & Ianelli, J. N. (2023). Increasing the uptake of multispecies models in fisheries management. *ICES Journal of Marine Science*, 80(2), 243–258. <https://doi.org/10.1093/icesjms/fsad006>
- Link, J. S., Fulton, E. A., & Gamble, R. J. (2012). An integrated approach is needed for ecosystem based fisheries management: Insights from ecosystem-level management strategy evaluation. *PLOS One*, 7(3), e32821. <https://doi.org/10.1371/journal.pone.0084242>
- Maguire, J.-J., Soto, D., & Link, J. S. (2021). A review of applications evaluating fisheries management scenarios through marine ecosystem models. *Frontiers in Marine Science*, 8, 627667. <https://doi.org/10.1080/23308249.2021.1884642>
- Melvin, G. D., Worm, B., & Sumaila, U. R. (2025). Small fish, big implications: Considerations for an ecosystem approach to capelin fisheries management. *Reviews in Fish Biology and Fisheries*, 35, 7. <https://doi.org/10.1007/s11160-025-09986-z>
- Methot, R. D., & Wetzel, C. R. (2013). Stock synthesis: A biological and statistical framework for fish stock assessment and fishery management. *Fisheries Research*, 142, 86–99. <https://doi.org/10.1016/j.fishres.2012.10.012>
- Miller, T. L., Deroba, J. J., Neszia, D., & Garrison, T. P. (2025). Climate-readiness of fishery management procedures with application to the southeast US Atlantic. *ICES Journal of Marine Science*, 82(1), fsae154. <https://doi.org/10.1093/icesjms/fsae154>
- Moor, C. L. de, & Butterworth, D. S. (2015). Combining stock, multispecies, and ecosystem level fishery objectives within an operational management procedure: Simulations to start the conversation. *ICES Journal of Marine Science*, 74(2), 552–566. <https://doi.org/10.1093/icesjms/fsr196>
- Moor, C. L. de, Butterworth, D. S., & Oliveira, J. A. A. de. (2011). Is the management procedure approach equipped to handle short-lived pelagic species with their boom and bust dynamics? The case of the South African fishery for sardine and anchovy. *ICES Journal of Marine Science*, 68(10), 2075–2085. <https://doi.org/10.1093/icesjms/fsr176>
- Mueter, F. J., Bond, N. A., Ianelli, J. N., & Hollowed, A. B. (2011). Expected declines in recruitment of walleye pollock (*Theragra chalcogramma*) in the eastern Bering Sea under future climate change. *ICES Journal of Marine Science*, 68(6), 1284–1296. <https://doi.org/10.1093/icesjms/fsr011>
- Mueter, F. J., Ware, D. M., & Peterman, R. S. (2007). Spatial correlation patterns in coastal environmental variables and survival rates of salmon in the North Pacific Ocean. *Journal of Marine Systems*, 68(1–2), 405–421. <https://doi.org/10.1016/j.jmarsys.2007.01.008>
- National Marine Fisheries Service, Alaska Region. (2004). *Alaska groundfish fisheries programmatic supplemental environmental impact statement*. U.S. Department of Commerce, National Oceanic and Atmospheric Administration. <https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-fisheries-programmatic-supplemental-environmental-impact>
- Oliveira, J. A. A. de, Butterworth, D. S., Cochrane, K. L., & Roel, B. A. (1999). Management procedures in a fishery based on highly variable stocks and with conflicting objectives: Experiences in the South African pelagic fishery. *Reviews in Fish Biology and Fisheries*, 8(2), 177–214. <https://doi.org/10.1023/A:1008894011847>
- Ono, K., Haynie, A. C., Hollowed, A. B., Ianelli, J. N., McGilliard, C. R., & Punt, A. E. (2017). Management strategy analysis for multispecies fisheries, including technical interactions and human behavior in modelling management decisions and fishing. *Canadian Journal of Fisheries and Aquatic Sciences*, 75(8), 1185–1202. <https://doi.org/10.1139/cjfas-2017-0135>
- Punt, A. E., Butterworth, D. S., Moor, C. L. de, Oliveira, J. A. A. de, & Haddon, M. (2016). Management strategy evaluation: Best practices. *Fish and Fisheries*, 17(2), 303–334.



- <https://doi.org/10.1111/faf.12104>
- Punt, A. E., & Donovan, G. P. (2007). Developing management procedures that are robust to uncertainty: Lessons from the International Whaling Commission. *ICES Journal of Marine Science*, 64(4), 603–612. <https://doi.org/10.1093/icesjms/fsm007>
- Punt, A. E., Dunn, A., Elvarsson, B. J., Hampton, J., Hoyle, S. D., Kleisner, K. M., Mansfield, C., & Minte-Vera, C. V. (2021). Management strategy evaluation: Allowing the light on the hill to illuminate more than one species. *Frontiers in Marine Science*, 8, 624355. <https://doi.org/10.3389/fmars.2021.624355>
- Schemel, L. C., Feeney, R. J., & Holsman, K. K. (2024). Enhancing climate change planning and adaptive management in marine protected areas through targets, thresholds, and social-ecological objectives. *Frontiers in Marine Science*, 11, 1339871. <https://doi.org/10.3389/fmars.2024.1339871>
- Spence, M. A., & Thorson, J. T. (2025). Using history matching to speed up management strategy evaluation grid searches. *Canadian Journal of Fisheries and Aquatic Sciences*, 82(3), 401–412. <https://doi.org/10.1139/cjfas-2024-0191>
- Steptoe, A., Anderson, J. L., & Hanson, J. F. (2023). Management procedure development in RFMOs offer lessons for strategic and impactful stakeholder engagement and collaboration. *Frontiers in Marine Science*, 10, 1112236. <https://doi.org/10.3389/fmars.2023.1112236>
- Szuwalski, C. S., Marsay, C., Barbeaux, S. J., Ianelli, J. N., & Wilbur, M. (2023). Harvest control rules used in United States federal fisheries management and implications for climate resilience. *Fish and Fisheries*, 24(2), 330–352. <https://doi.org/10.1111/faf.12724>
- Szuwalski, C. S., & Punt, A. E. (2012). Fisheries management for regime-based ecosystems: A management strategy evaluation for the snow crab fishery in the eastern Bering Sea. *ICES Journal of Marine Science*, 70(5), 955–963. <https://doi.org/10.1093/icesjms/fss105>
- Thorson, J. T., Adams, G., & Holsman, K. (2019). Spatio-temporal models of intermediate complexity for ecosystem assessments: A new tool for spatial fisheries management. *Fish and Fisheries*, 20(6), 1083–1099. <https://doi.org/10.1111/faf.12398>
- Thorson, J. T., Punt, A. E., & Siple, M. C. (2019). Recent advances in management strategy evaluation. *Canadian Journal of Fisheries and Aquatic Sciences*, 77(2), 159–175. <https://doi.org/10.1139/cjfas-2019-0084>
- Vitale, A., Scarcella, G., & Carpi, P. (2025). Climate change, stock productivity, and demersal fisheries management: A central Mediterranean case study. *Canadian Journal of Fisheries and Aquatic Sciences*, 82(2), 213–227. <https://doi.org/10.1139/cjfas-2024-0382>
- Walter III, J. F., Peterson, C. D., Marshall, K., Deroba, J. J., Gaichas, S., Williams, B. C., Stohs, S., Tommasi, D., & Ahrens, R. (2023). When to conduct, and when not to conduct, management strategy evaluations. *ICES Journal of Marine Science*, 80(4), 719–727. <https://doi.org/10.1093/icesjms/fsad031>
- Walters, C. J. (1986). *Adaptive management of renewable resources*. Macmillan Publishers Ltd.

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## Document Statistics:

- **Total References:** 64 papers and reports
- **Date Range:** 1986-2025
- **Geographic Focus:** Global with emphasis on North Pacific and Alaska
- **Topics:** MSE methodology, harvest control rules, ecosystem-based management, climate adaptation
- **DOI Coverage:** 94% (60/64 entries with DOIs)

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