Alaska Fisheries Science Center
Economic and Human Dimensions Science Review
Seattle, WA, July 17-20th

Supplemental Reading by Session

Session I. Economic and Human Dimension Science Activities and Regional Management Needs

Alaska Regional Strategic plan 2016-2020
NOAA Priorities and Annual Guidance
NOAA Next Generation Strategic Plan

Session II. Communication of research results and peer review process

Groundfish Economic SAFE
Crab Economic SAFE

Session III. Recreational Fisheries Economics Program

NOAA Recreational Fisheries Action Plan
Halibut Catch Sharing Plan

Call, I.L., and D.K. Lew (2015). Tradable Permit Programs: What Are the Lessons for the New Alaska Halibut Catch Sharing Plan? *Marine Policy*, 52, pp. 125-137.

Larson, D. M., and D.K. Lew (2013). How Do Harvest Rates Affect Angler Trip Patterns? *Marine Resource Economics*, 28(2), pp. 155-173.

Larson, D.M., and D.K. Lew (2014). The Opportunity Cost of Travel Time as a Noisy Wage Fraction. *American Journal of Agricultural Economics*, 96(2), pp. 420-437.

Lew, D.K., and D.M. Larson (Forthcoming). Stated Preferences of Alaska Resident Saltwater Anglers for Contemporary Regulatory Policies. *Marine Fisheries Review*.

Lew, D.K., and D.M. Larson (2011). A Repeated Mixed Logit Approach to Valuing a Local Sport Fishery: The Case of Southeast Alaska Salmon. *Land Economics*, 87(4), pp. 712-729.

Lew, D.K., and D.M. Larson (2012). Economic Values for Saltwater Sport Fishing in Alaska: A Stated Preference Analysis. *North American Journal of Fisheries Management*, 32(4), pp. 745-759.

Lew, D.K., and D.M. Larson (2015). Stated Preferences for Size and Bag Limits of Alaska Charter Boat Anglers. *Marine Policy*, 61, pp. 66-76.

Lew, D.K., J. Lee, and D.M. Larson (2010). Saltwater Sport Fishing in Alaska: A Summary and Description of the Alaska Saltwater Sport Fishing Economic Survey, 2007. U.S. Dept of Commerce, *NOAA Technical Memorandum NMFS-AFSC-214*, 229 p.

Lew, D.K., D. Putman, and D. M. Larson (2016). Attitudes and Preferences Toward Pacific Halibut Management Alternatives in the Saltwater Sport Fishing Charter Sector in Alaska: Results from a Survey of Charter Halibut Permit Holders. U.S. Dept of Commerce, *NOAA Technical Memorandum NMFS-AFSC-326*, 58 p. http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-326.pdf

Lew, D.K., G. Sampson, A. Himes-Cornell, J. Lee, and B. Garber-Yonts (2015). Costs, Earnings, and Employment in the Alaska Saltwater Sport Fishing Charter Sector, 2011-2013. U.S. Dept of Commerce, *NOAA Technical Memorandum NMFS-AFSC-2738*, 134 p.

Lew, D.K., and C. Seung (2010). The Economic Impact of Saltwater Sportfishing Harvest Restrictions in Alaska: An Empirical Analysis of Nonresident Anglers. *North American Journal of Fisheries Management*, 30, pp. 538-551.

Lew, D.K., and C. Seung (2014). On the Statistical Significance of Regional Economic Impacts from Changes in Recreational Fishing Harvest Limits in Southern Alaska. *Marine Resource Economics*, 29(3), pp. 241-257.

Whitehead, J., and D.K. Lew (2017). Estimating Recreation Benefits through Joint Estimation of Revealed and Stated Preference Discrete Choice Data. Working paper.

Session IV. Socioeconomic, Cultural, and Community Research

Colburn, L.L. and M. Jepson (2012). Social Indicators of Gentrification Pressure in Fishing Communities: A Context for Social Impact Assessment. *Coastal Management* 40, pp. 289-300.

Himes-Cornell, A., K. Hoelting, C. Maguire, L. Munger-Little, J. Lee, J. Fisk, R. Felthoven, C. Gellar and P. Little (2013). Community profiles for North Pacific fisheries-Alaska. US Dep. Commer. *NOAA Tech. Memo. NMFS-AFSC*, 259 p.

Himes-Cornell, A. and S. Kasperski (2015). Assessing climate change vulnerability in Alaska's fishing communities. *Fisheries Research*, 162**,** pp. 1-11.

Himes-Cornell, A. and S. Kasperski (2016). Using Socioeconomic and Fisheries Involvement Indices to Understand Alaska Fishing Community Well-Being. *Coastal Management*, 44**,** pp. 36-70.

Himes-Cornell, A., S. Kasperski, K. Kent, C. Maguire, M. Downs, S. Weidlich, and S. Russell (2015). "Social baseline of the Gulf of Alaska groundfish trawl fishery: Results of the 2014

social survey." U.S. Dep. Commer., *NOAA Tech. Memo. NMFS-AFSC-306*, 98 p. plus Appendices.

Himes-Cornell, A. and K. Kent (2014a). Involving Fishing Communities in Data Collection: A Summary and Description of the Alaska Community Survey, 2010. U.S. Dep. Commerce, *NOAA Tech. Memo. NMFS-AFSC280*, 170 p.

Himes-Cornell, A. and K. Kent (2014b). Involving Fishing Communities in Data Collection: A Summary and Description of the Alaska Community Survey (2011). U.S. Dep. Commerce, *NOAA Tech. Memo. NMFS-AFSC284*, 171 p.

Himes-Cornell, A., C. Maguire, S. Kasperski, K. Hoelting and R. Pollnac (2016). Understanding vulnerability in Alaska fishing communities: A validation methodology for rapid assessment of indices related to well-being. *Ocean & Coastal Management*, 124**,** pp. 53-65.

Himes-Cornell, A., C. Package and A. Durland (2011). Improving community profiles for the North Pacific fisheries. U.S. Dep. Commerce, *NOAA Tech. Memo. NMFS-AFSC-230*. 85 p.

Himes-Cornell, A. and A.N. Santos (2017). Involving fishing communities in data collection: a summary and description of the Alaska Community Survey, 2013. U.S. Dep. Commer., *NOAA Tech. Memo. NMFS-AFSC-340*, 195 p.

Jepson, M. and L.L. Colburn (2013). Development of Social Indicators of Fishing Community Vulnerability and Resilience in the U.S. Southeast and Northeast Regions. U.S. Dept. of Commerce, *NOAA Technical Memorandum NMFS-F/SPO-129*, 64 p.

Kent, K. and A. Himes-Cornell (2016). Making Landfall: Linkages between Fishing Communities and Support Services. *Coastal Management*, 44**,** pp. 279-294.

North Pacific Fisheries Management Council/ National Marine Fisheries Service (NPFMC/NMFS) (2016). Twenty-Year Review of the Pacific Halibut and Sablefish Individual Fishing Quota Management Program. December, 2016. Available online: http://www.npfmc.org/wp-content/PDFdocuments/halibut/IFQProgramReview_1216.pdf

North Pacific Fisheries Management Council (NPFMC) (2017). Ten-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/ Aleutian Islands. January 2017. Available online: https://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Crab/Crab10yrReview_Final2017.pdf

Santos, A.N., K. Sparks, S. Kasperski, A. Himes-Cornell, K. Hoelting and C. Maguire (2017). Groundtruthing social vulnerability indices of Alaska fishing communities. *Under AFSC review*.

Sepez, J.A., B.D. Tilt, C.L. Package, H.M. Lazrus and I. Vaccaro (2005). Community profiles for North Pacific fisheries - Alaska. U. S. Dep. Commerce, *NOAA Tech. Memo. NMFSAFSC-160*, 552 p.

Szymkowiak, M., and A. Himes-Cornell (2015). Towards individual-owned and owner-operated fleets in the Alaska Halibut and Sablefish IFQ program. *Maritime Studies*, 14(1), pp. 19.

Szymkowiak, M., and R. Felthoven (2016). Understanding the determinants of hired skipper use in the Alaska halibut individual fishing quota Fishery. *North American Journal of Fisheries Management*, 36(5), pp. 1139-1148.

Szymkowiak, M., and A. Himes-Cornell (2017). Do Active Participation Measures Help Fishermen Retain Fishing Privileges? *Coastal Management*, 45(1), pp. 56-72.

Session V. Protected Species Economics

Proceedings of the 2014 NOAA Economics of Protected Resources Workshop

Bisack, K.D., D.E. Squires, D.W. Lipton, J.R. Hilger, D.S. Holland, D.H. Johnson, M-Y. Lee, R. Lent, D.K. Lew, G. Magnusson, M. Pan, L.E. Queirolo, S. Stophs, C.L. Speir, K.A. Wallmo (2015). Proceedings of the 2014 NOAA Economics of Protected Resources Workshop. U.S. Dept of Commerce, NOAA Technical Memorandum, NMFS-NE-233, 179 p.

Cardenas, S.A., and D.K. Lew (2016). Factors Influencing Willingness to Donate to Marine Endangered Species Recovery in the Galapagos National Park, Ecuador. *Frontiers in Marine Science* 3, 60 p.

Hobbs, R. C., P.R. Wade, and K. E. W. Shelden (2015). Viability of a Small, Geographically-isolated Population of Beluga Whales, *Delphinapterus leucas*: Effects of Hunting, Predation, and Mortality Events in Cook Inlet, Alaska *Marine Fisheries Review* 77(2), pp. 59-88.

Johnston, R.J., K.J. Boyle, W. Adamowicz, J. Bennett, R. Brouwer, T.A. Cameron, W.M. Hanemann, N. Hanley, M. Ryan, R. Scarpa, R. Tourangeau, and C.A. Vossler (2017). Contemporary Guidance for Stated Preference Studies. *Journal of the Association of Resource and Environmental Economists* 4(2), pp. 319-405.

Johnston, R., D. Jarvis, K. Wallmo, and D.K. Lew (2015). Characterizing Large Scale Spatial Pattern in Nonuse Willingness to Pay: An Application to Threatened and Endangered Marine Species. *Land Economics* 91(4), pp. 739-761.

Lew, D.K. (2010) Nonuse Values of Critical Habitat for the Cook Inlet Beluga Whale. Appendix A in NOAA Fisheries Service, Final RIR/4(b)(2) Preparatory Assessment/FRFA for the Critical Habitat Designation of Cook Inlet Beluga Whale. August 11, 2010, 247 p.

Lew, D.K. (2015). Willingness to Pay for Threatened and Endangered Marine Species: A Review of the Literature and Prospects for Policy Use. *Frontiers in Marine Science* 2, pp. 96.

Lew, D.K. (2017). Is there an Urban-Rural Divide in Stated Preferences for Protecting Endangered Species? Working paper.

Lew, D.K., D.F. Layton, and R.D. Rowe (2010). Valuing Enhancements to Endangered Species Protection Under Alternative Baseline Futures: The Case of the Steller Sea Lion. *Marine Resource Economics* 25(2), pp. 133-154.

Lew, D.K., and K. Wallmo (2011). External Tests of Embedding and Scope in Stated Preference Choice Experiments: An Application to Endangered Species Valuation. *Environmental and Resource Economics* 48(1), pp. 1-23.

Lew, D.K., and K. Wallmo (2017). Temporal Stability of Stated Preferences for Endangered Species Protection in Choice Experiments. *Ecological Economics* 131, pp. 87-97.

NOAA Science Advisory Board (2016). An Assessment of the Use and Potential Use of Ecosystem Service Valuation (ESV) within NOAA. A Report from the NOAA Science Advisory Board. Available at: http://sab.noaa.gov/sites/SAB/Reports/ESMWG/ESV%20Final%20Report%20to%20NOAA%20May%2023.pdf.

Pienaar, E., D.K. Lew, and K. Wallmo (2013). Are Environmental Attitudes Influenced by Survey Context? An Investigation of the Context Dependency of the New Ecological Paradigm (NEP) Scale. *Social Science Research* 42(6), pp. 1542-1554.

Pienaar, E., D.K. Lew, and K. Wallmo (2015). The Importance of Survey Content: Testing for the Context Dependence of the New Ecological Paradigm Scale. *Social Science Research* 51, pp. 338-349.

Pienaar, E.F., D.K. Lew, and K. Wallmo (2017). Intention to Pay for the Protection of Threatened and Endangered Marine Species: Implications for Conservation Program Design. *Ocean and Coastal Management* 138, pp. 170-180.

Sanchirico, J., D.K. Lew, A. Haynie, D. Kling, and D.F. Layton (2013). Conservation Values in Marine Ecosystem-Based Management. *Marine Policy* 38, pp. 523-530.

Wallmo, K., K. Bisack, D.K. Lew, and D.E. Squires (eds.) (2016). *The Economics of Protected Marine Species: Concepts in Research and Management*. Lausanne: Frontiers Media. Available at: http://journal.frontiersin.org/researchtopic/3306/the-economics-of-protected-marine-species-concepts-in-research-and-management

Wallmo, K., and D.K. Lew (2011). Valuing Improvements to Threatened and Endangered Marine Species: An Application of Stated Preference Choice Experiments. *Journal of Environmental Management* 92, pp. 1793-1801.

Wallmo, K., and D.K. Lew (2012). Public Values for Recovering and Downlisting Threatened and Endangered Marine Species. *Conservation Biology* 26(5), pp. 830-839.

Wallmo, K., and D.K. Lew (2015). Public Preferences for Endangered Species Recovery: An Examination of Geospatial Scale and Non-Market Values. *Frontiers in Marine Science* 2, pp. 55.

Wallmo, K., and D.K. Lew (2016). A Comparison of Regional and National Values for Recovering Threatened and Endangered Marine Species in the United States. *Journal of Environmental Management* 179, pp. 38-46.

Session VI. Commercial Fisheries Economics Program

North Pacific Catch Share Performance measures from 2016 Groundfish SAFE

Abbott, J. K., B. Garber-Yonts and J.E. Wilen (2010). Employment and remuneration effects of IFQs in the Bering Sea/Aleutian Islands crab fisheries. *Marine Resource Economics* 25(4), pp. 333-354.

Abbott, J.K. and A.C. Haynie (2012). What Are We Protecting? The Challenges of Marine Protected Areas for Multispecies Fisheries. *Ecological Applications* 22(3), pp. 762–777.

Abbott, J., A. Haynie, and M. Reimer (2015). Hidden Flexibility: Institutions, Incentives and the Margins of Selectivity in Fishing. *Land Economics* 91(1), pp. 169–195.

Alaska Fisheries Science Center (AFSC) (2014). Council Update on the Amendment 91 Chinook Salmon Economic Data Report Program. Discussion Paper. Available Online: https://npfmc.legistar.com/View.ashx?M=F&ID=2894927&GUID=F7085550-76B4-4468-AF0A-E1DB615E1C9D.

Breslow, S., D. Holland, P. Levin, K. Norman, M. Poe, C. Thomson, R. Barnea, P. Dalton, N. Dolsak, C. Greene, K. Hoelting, S. Kasperski, R. Kosaka, D. Ladd, A. Mamula , S. Miller, B. Sojka, C. Speir, S. Steinbeck, and N. Tolimieri. (2014). "Human Dimensions of the CCIEA". In: Levin, P.S., Wells, B.K., and M.B. Sheer, (Eds.), California Current Integrated Ecosystem Assessment: Phase III Report 2013. Available from http://www.noaa.gov/iea/Assets/iea/documents/HumanDimensions_FINAL.pdf.

Brinson, A.A., and E. M. Thunberg (2013). The Economic Performance of U.S. Catch Share Programs. U.S. Dept. of Commer., *NOAA Technical Memorandum NMFSF/SPO-133*, 160 p.

Brinson, A. A., and E. M. Thunberg (2016). Performance of federally managed catch share fisheries in the United States. *Fisheries Research*, *179*, pp. 213-223.

Call, I.L., and D.K. Lew (2015). "Tradable Permit Programs: What Are the Lessons for the New Alaska Halibut Catch Sharing Plan?" *Marine Policy* 52:, pp. 125-137.

Dalton, M. (2001). El Niño, expectations, and fishing effort in Monterey Bay, California. *Journal of Environmental Economics and Management* 42:, pp. 336-359.

Dalton, M. (2017). Consistent estimation of disaggregated import demand for Alaskan king crab. *Marine Resource Economics*, In Review.

Dalton, M., D. Holland, D. Squires, J. Terry and D. Tomberlin (2016). Economic considerations in the implementation of National Standard 1. *NOAA Technical Report*, In Review.

Dalton, M. and J. Lee (2015). Alaska fisheries and global trade: red king crab, Paralithodes camtschaticus; sockeye salmon, Oncorhynchus nerka; and walleye pollock, Gadus chalcogrammus.
Marine Fisheries Review 77: pp. 84-90. (http://spo.nmfs.noaa.gov/mfr773/mfr7737.pdf)

Fell, H. and A. Haynie (2011). Estimating Time-varying Bargaining Power: A Fishery Application. *Economic Inquiry* 49(3), pp. 685-696.

Fell, H. and A. Haynie (2012). Spatial Competition with Changing Market Institutions. *Journal of Applied Econometrics*, DOI: 10.1002/jae.2272.

Felthoven, R.G. (2002). Effects of the American Fisheries Act on Capacity, Utilization and Technical Efficiency. *Marine Resource Economics* 17(3), pp. 181–205. *JSTOR*, www.jstor.org/stable/42629363.

Felthoven, R., J. Lee and K. Schnier (2014). Cooperative Formation and Peer Effects in Fisheries. *Marine Resource Economics* 29(2), pp. 133-156.

Felthoven, R., C. Morrison Paul, and M. Torres (2009). Measuring Productivity Change and its Components for Fisheries: The Case of the Alaskan Pollock Fishery, 1994-2002. *Natural Resource Modeling* 22(1), pp. 105-136.

Fissel, B., R. Felthoven, S. Kasperski, and C. O'Donnell (2015). Decomposing Productivity and Efficiency Changes in the Alaska Head and Gut Factory Trawl Fleet. *Marine Policy* 62, pp. 337-346.

Haynie, A. (2009). SSC Evaluation of the Salmon Bycatch ICA. *Presentation to the NPFMC Scientific and Statistical Committee (SSC)*, Available online: https://www.npfmc.org/wp-content/PDFdocuments/bycatch/HaynieICA309.pdf.

Haynie, A**.** (2014). Estimating the Value of a Fishing Right: An Analysis of Changing Usage and Value in the Western Alaska Community Development Quota (CDQ) Program. *Fisheries Science* 80(2), pp. 181-191.

Haynie, A.**,** R. Hicks and K. Schnier (2009). Common Property, Information, and Cooperation: Commercial Fishing in the Bering Sea. *Ecological Economics* 69(2), pp. 406-413.

Haynie, A**.** and D. Layton (2010). An Expected Profit Model for Monetizing Fishing Location Choices. *Journal of Environmental Economics and Management* 59(2), pp. 165-176.

Haynie, A.C., L. Pfeiffer, and J. Watson (2014). Spatial Economic Models of Pollock and Cod. *NPRB 62 BSIERP Project B72 Final Report*, 128 pp.

Haynie, A., P. Sullivan and J. Watson (2017). Using Vessel Monitoring System Data to Estimate Spatial Effort in Bering Sea Fisheries for Unobserved Trips. Working paper.

Holland, D.S., and S. Kasperski (2014). Fishery Income Diversification and Risk for Fishermen and Fishing Communities of the US West Coast and Alaska – Updated to 2012, Appendix HD1, Appendix to: Human Dimensions of the CCIEA, In: Levin, P.S., Wells, B.K., and M.B. Sheer (Eds.). California Current Integrated Ecosystem Assessment: Phase III Report 2013. Available from:http://www.noaa.gov/iea/Assets/iea/california/Report/pdf/11.Human%20dimensions%20Appendix_2013.pdf.

Holland, D.S. and S. Kasperski (2016). The Impact of Access Restrictions on Fishery Income Diversification of US West Coast Fishermen. *Coastal Management* 44(5), pp. 452-463.

Holland, D.S. C. Speir, J. Agar, S. Crosson, G. DePiper, S. Kasperski, A.W. Kitts, L. Perruso (2017). Do Catch Shares Reduce Diversification of Fishers' Income and Increase Risk? *PNAS*, In Review.

Holland, D.S., E. Thunberg, J. Agar, S. Crosson, C. Demerest, S. Kasperski, L. Perruso, E. Steiner, J. Stephen, A. Strelcheck, and M. Travis (2014). U.S. Catch Share Markets: A Review of Characteristics and Data Availability. U.S. Dept. of Commer., *NOAA Technical Memorandum NMFS-F/SPO-145*, 67 p.

Holland, D.S., E. Thunberg, J. Agar, S. Crosson, C. Demarest, S. Kasperski, L. Perruso, E. Steiner, J. Stephen, A. Strelcheck, and M. Travis (2015). US Catch Share Markets: A Review of Data Availability and Impediments to Transparent Markets. *Marine Policy* 57, pp. 103-110.

Hsueh, L, and S. Kasperski (2017). The Impact of Catch Shares on Multiregional Fishery Participation and Effort: The Case of West Coast Harvesters in the Alaska Fisheries. *Marine Resource Economics*, In Review.

Kasperski, S. (2015). Optimal Multi-species Harvesting in Ecologically and Economically Interdependent Fisheries. *Environmental and Resource Economics* 61(4), pp. 517-557.

Kasperski, S. (2016). Optimal Multispecies Harvesting in the Presence of a Nuisance Species. *Marine Policy* 64, pp. 55-63.

Kasperski, S. and D.S. Holland (2013). Income Diversification and Risk for Fishermen. *Proceedings of the National Academies of Science* 110(6), pp. 2076-2081.

Kroetz, K., D.K. Lew, and J.N. Sanchirico (2016). Recreational Leasing of Alaska Commercial Halibut Quota: The First Two Years of the Guided Angler Fish Provision. RFF Discussion Paper, RFF DP 16-39.

Kroetz, K., J.N. Sanchirico, and D.K. Lew (2015). Efficiency Costs of Social Objectives in Tradable Permit Programs. *Journal of the Association of Environmental and Resource Economists* 2(3), pp. 339-366.

Morrison Paul, C.J., M. Torres, and R. Felthoven (2009). Fishing Revenue, Productivity, and Product Choice in the Alaskan Pollock Fishery. *Environmental and Resource Economics* 44, pp. 457-474.

North Pacific Fisheries Management Council (NPFMC) (2008). Three-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/ Aleutian Islands. November 2008. Available online: https://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Crab/3yearreview1208.pdf

North Pacific Fishery Management Council (NPFMC) (2009). RIR/IRFA for a Chinook Salmon Bycatch Data Collection Program. Available online: https://www.npfmc.org/wp-content/PDFdocuments/bycatch/ChinookDataCollection1209.pdf

North Pacific Fisheries Management Council (NPFMC) (2010). Five-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/ Aleutian Islands. December 2010. Available online: https://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Crab/5YearRev1210.pdf

North Pacific Fishery Management Council (NPFMC) (2012). Chum Salmon PSC Management Measures EA Appendices 5-7: Analytical results of Alternatives 1 and 3 on impacts to chum salmon. Available online: https://www.npfmc.org/wp-content/PDFdocuments/bycatch/ChumPSC_Appendix5-7_1112.pdf#page=185

North Pacific Fishery Management Council (NPFMC) (2014). Discussion paper: Bering Sea Chinook and chum salmon bycatch management measures. Online: https://npfmc.legistar.com/View.ashx?M=F&ID=3096798&GUID=1F3F481F-40E6-42DE-ADBB-02CCD66BFA7D.

North Pacific Fisheries Management Council / National Marine Fisheries Service (NPFMC/NMFS). (2015). Public Review Draft Environmental Assessment/ Regulatory Impact Review/ Initial Regulatory Flexibility Analysis for Proposed Amendment [XX] to the Fishery Management Plan for Bering Sea Aleutian Islands Groundfish: Bering Sea Chinook and Chum salmon bycatch management measures. Online: http://npfmc.legistar.com/gateway.aspx?M=F&ID=1eb8347c-1280-444e-bd44-0560c64c6b39.pdf.

North Pacific Fisheries Management Council/ National Marine Fisheries Service (NPFMC/NMFS). (2016). Twenty-Year Review of the Pacific Halibut and Sablefish Individual Fishing Quota Management Program. December, 2016. Available online: http://www.npfmc.org/wp-content/PDFdocuments/halibut/IFQProgramReview_1216.pdf

North Pacific Fisheries Management Council (NPFMC). (2017). Ten-Year Program Review for the Crab Rationalization Management Program in the Bering Sea/ Aleutian Islands. January 2017. Available online: https://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Crab/Crab10yrReview_Final2017.pdf

North Pacific Fisheries Management Council (NPFMC) (2017). Abundance-based management alternatives for Pacific halibut PSC. Available online: http://npfmc.legistar.com/gateway.aspx?M=F&ID=c58db10b-f3e7-4f64-9797-87dfa4f59dc7.pdf.

O'Farrell, S., J. N. Sanchirico, I. Chollett , M.Cockrell , S. Murawski, , J. T. Watson, A. Haynie, A. Strelcheck , and L. Perruso. (2017). "Improving detection of short-duration behaviour in

fishing vessel tracks by feature engineering of training data," *ICES Journal of Marine Science*, doi:10.1093/icesjms/fsw244.

Punt, A.E., D. Poljak, M.G. Dalton, and R.J. Foy. (2014). Evaluating the impact of OA on fishery yields and profits: The example of red king crab in Bristol Bay. *Ecological. Modelling* 285, pp. 39-53. doi: 10.1016/j.ecolmodel.2014.04.017.

Reimer, M.N., J.K. Abbott, and A.C. Haynie (2017). Empirical Models of Fisheries Production : Conflating Technology with Incentives? *Marine Resource Economics* 32. doi:10.1086/690677

Reimer, M. and A.C. Haynie. (2017). Mechanisms Matter for Evaluating the Economic Impacts of Marine Reserves. In review.

Schnier, K.E. and R.G. Felthoven (2011). Accounting for Spatial Heterogeneity and Autocorrelation in Spatial Discrete Choice Models: Implications for Behavioral Predictions. *Land Economics* 87, pp. 382-402.

Schnier, K. E. and R. G. Felthoven (2013). Production Efficiency and Exit in Rights-Based Fisheries." *Land Economics* 87(3), pp. 538-557.

Seung, C., M. Dalton, A. Punt, D. Poljak, and R. Foy (2015). Economic Impacts of Changes in an Alaska Crab Fishery from Ocean Acidification. *Climate Change Economics* 6(4): 1550017, 35 p. http://dx.doi.org/10.1142/S2010007815500177

Seung, C and J. Ianelli (2016). Regional economic impacts of climate change: a computable general equilibrium analysis for an Alaska fishery". *Natural Resource Modeling* 29(2), pp. 289-333. doi: 10.1111/nrm.12092

Seung, C. and E. Waters (2009). Measuring the Economic Linkage of Alaska Fisheries: A Supply-Driven Social Accounting Matrix (SDSAM) Approach. *Fisheries Research* 97, pp. 17-23.

Seung, C. and E. Waters (2010). Evaluating Supply-Side and Demand-Side Shocks for Fisheries: A Computable General Equilibrium (CGE) Model for Alaska. *Economic Systems Research*, 22(1), pp. 87-109.

Thunberg, E., J. Walden, J. Agar, R. Felthoven, A. Harley, S. Kasperski, J. Lee, T. Lee, A. Mamula, J. Stephen, and A. Strelcheck (2015). Measuring Changes in Multi-Factor Productivity in U.S. Catch Share Fisheries. *Marine Policy* 62, pp. 294-301.

Thunberg, E., J. Agar, S. Crosson, B. Garber-Yonts, A. Harley, A. Kitts, T. Lee, C. Lian, C. Liese, M. Pan, L. Perruso, G. Silva, D. Squires, E. Steiner, and S. Stohs. 2015. A Snapshot of NOAA Fisheries Data Collection of Commercial Fishery Costs. U.S. Dept of Commer., NOAA Technical Memorandum NMFS-F/SPO-154, 331 p.

Torres, M. and R. Felthoven (2014). Productivity Growth and Product Choice in Catch Share Fisheries: the Case of the Alaska Pollock. Marine Policy 50 Part A, pp. 280-289.

Walden, J., J. Agar, R. Felthoven, A. Harley, S. Kasperski, J. Lee, T. Lee , A. Mamula, , J. Stephen, A. Strelcheck, and E. Thunberg. (2014). Productivity Change in U.S. Catch Shares Fisheries. U.S. Dept. of Commer., *NOAA Technical Memorandum NMFS-F/SPO-146*, p.137.

Waters, E., C. Seung, M. Hartley, and M. Dalton. (2014). "Measuring the Multiregional Economic Contribution of an Alaska Fishing Fleet with Linkages to International Markets" *Marine Policy* 50, Part A, pp. 238-248.

Watson, J.T. and A.C. Haynie. (2016). "Using Vessel Monitoring System Data to Identify and Characterize Trips Made by Fishing Vessels in the United States North Pacific." *PLoS ONE* 11(10): e0165173. doi:10.1371/journal.pone.0165173.

Session VII. Ecosystem/Integrated Research

NOAA EBFM Road Map
NOAA Climate Science Strategy

Cooley, S.R., J.E. Rheuban, D.R. Hart, V. Luu, J.A. Hare, S.C. Doney (2015). An integrated assessment model for helping the United States sea scallop (Placopecten magellanicus) fishery plan ahead for ocean acidification and warming. *PLoS ONE* 10(5), e0124145. https://doi.org/10.1371/journal.pone.0124145

Haynie, A. and L. Pfeiffer (2012). Why economics matters for understanding the effects of climate change on fisheries. *ICES Journal of Marine Science*, 69 (7), pp. 1160-1167.

Haynie, A. and L. Pfeiffer. 2012. "Why economics matters for understanding the effects of climate change on fisheries." ICES Journal of Marine Science, 69 (7): 1160-1167.

Holsman, Kirstin, J. Samhouri, G. Cook, E. Hazen, E. Olsen, M. Dillard, S. Kasperski, S. Gaichas, C.R. Kelble, M. Fogarty, and K. Andrews (2017). An ecosystem-based approach to risk assessment. *Forthcoming in Ecosystem Health and Sustainability*.

Ianelli, J.N., A. Hollowed, A. Haynie, F. Mueter, and N. Bond. (2011). Evaluating Management Strategies For Eastern Bering Sea Walleye Pollock (Theragra Chalcogramma) in a Changing Environment. *ICES Journal of Marine Science* 68 (6):, pp. 1297-1304.

Mathis, J.T., S.R. Cooley, N. Lucey, S. Colt, J. Ekstrom, T.P. Hurst, C. Hauri, W. Evans, J.N. Cross, and R.A. Feely (2015). Ocean acidification risk assessment for Alaska's fishery sector. *Progress in Oceanography* 136, pp. 71-91.

National Oceanic and Atmospheric Administration. (2014). *F*inal Environmental Impact Statement Steller Sea Lion Protection Measures for Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area. U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

Punt, A.E., D. Poljak, M.G. Dalton, and R.J. Foy (2014). Evaluating the impact of OA on fishery yields and profits: The example of red king crab in Bristol Bay. *Ecological Modelling* 285, pp. 39-53. doi: 10.1016/j.ecolmodel.2014.04.017.

Sanchirico, J., D. Lew, A. Haynie, D. Kling and D. Layton (2013).Conservation values in marine ecosystem-based management. *Marine Policy* 38, pp. 523-530.

Seung, C.K., M.G. Dalton, A.E. Punt, D. Poljak and R.J. Foy (2015). Economic impacts of changes in a crab fishery from ocean acidification. Climate Change Economics 6: http://dx.doi.org/10.1142/S2010007815500177

Seung, C. and J. Ianelli (2016). Regional economic impacts of climate change: a computable general equilibrium analysis for an Alaska fishery. *Natural Resource Modeling* 29, pp. 289-333. doi: 10.1111/nrm.12092

Seung, C. and J. Ianelli. (2017). Assessment of management strategies for eastern Bering Sea walleye pollock fishery with climate change. In review.

Shelton, A.O., M.E. Hunsicker, E.J. Ward, B.E. Feist, R. Blake, C.L. Ward, B.C. Williams, J.T. Duffy-Anderson, A.B. Hollowed, and A.C. Haynie (2017). Spatio-temporal models reveal subtle changes to demersal communities following the Exxon Valdez oil spill. *ICES J. Mar. Sci.* https://doi.org/10.1093/icesjms/fsx079

Sigler, M.F., T.P. Hurst, M.T. Dalton, R.J. Foy, J.T. Mathis, and R.P. Stone (2015). NOAA's Alaska Ocean Acidification Research Plan for FY15-FY17. AFSC Processed Rep. 2015-02, 59 p. Alaska Fish. Sci. Cent., NOAA, Natl. Mar. Fish. Serv., 7600 Sand Point Way NE, Seattle WA 98115.

Zador, S., S. Gaichas, S. Kasperski, C.L. Ward, R. Blake, N.C. Ban, A. Himes-Cornell, and Z. Koehn. Linking ecosystem processes to communities of practice through commercially fished species in the Gulf of Alaska. *Forthcoming in the ICES JMS*.