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7	BEFORE THE HEARING EXAMINER
8	CITY OF SEATTLE
9	In the Matter of the Appeals of ()
10	 Walling Ford Community Council, Walling Ford Community Council, Walling Ford W-17-014
11	ET AL.)) OPCD'S PRELIMINARY WITNESS AND
12	Of adequacy of the FEIS issued by the Director,) EXHIBIT LIST Office of Planning and Community Development.)
13))
14	
15	Respondent Seattle Office of Planning and Community Development (OPCD) submits the
16	following preliminary lists of witnesses and exhibits. OPCD has not made a final determination as
17	to the witnesses it may call or the exhibits it may present at hearing. OPCD reserves the right to
18	amend, refine, or expand its list as Appellants develop their claims and following completion of
19	discovery. ¹
20	
21	
22	¹ The extent of the City's understanding of the Appellants' claims is limited to-date and based on Appellants' Notices of Appeal and very generalized descriptions of each witness's topics of testimony and credentials. As the Respondent
23	in this appeal, the City reserves its right to name witnesses that respond to the specific claims made by Appellants and their witnesses as those claims become more apparent through discovery, motions, and other pre-hearing practice.

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 1

I. WITNESSES

OPCD's preliminary witness list is set forth below. If for any reason, any of the listed witnesses becomes unavailable for hearing, OPCD reserves the right to substitute with another witness with similar qualifications, expertise, or familiarity with the issues on review. OPCD may decide not to call one or more witnesses listed, and reserves the right to add or delete any witnesses at the time it submits its final witness list or as otherwise authorized by the Hearing Examiner. Finally, OPCD reserves the right to call rebuttal fact and/or expert witnesses who are not listed below and to call as a witness any of the witnesses listed by the Appellants. Any of the potential witnesses identified may be contacted through the City's Counsel.

Because the City is a respondent in this matter, the scope and duration of each of the City witnesses' testimony will be responsive to the Appellants' claims in their case-in-chief and the scope of Appellant witnesses' testimony. At this stage in the proceeding, Appellants have not adequately disclosed their intentions to allow the City to meaningfully estimate the duration of the testimony of each of the City's witnesses. Based on their preliminary lists, Appellants have indicated that their witnesses could testify for over 70 hours (even accounting for duplication and not including the many witnesses for which various Appellants did not attempt to estimate time). The Appellants' collective estimate for the duration of their witnesses' testimony far exceeds the time the Examiner has allotted for this proceeding and what is appropriate given the needs of the case. The City intends to present its case within the confines of the time limits set by the Examiner. However, the extent to which each City witness will testify within that limit cannot yet be determined until the Appellants collectively refine their lists. The City intends to provide an estimate with its final list after Appellants reduce the number of witnesses, the time estimate for their witnesses, or both.

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 2

1	1. Geoffrey Wentlandt, OPCD. Mr. Wentlandt is a Senior Planning Manager at OPCD.	
2	2 He was the lead OPCD staffer for the preparation of the EIS as a whole and had	
3	significant involvement in the preparation of various sections of the EIS, appendice	
4	and responses to comments. He has significant expertise in the implementation of	
5	SEPA in the City of Seattle. He may be called to provide fact testimony about the	
6	proposal, various analyses in the EIS, the EIS process generally, comprehensive	
7		planning issues, and other matters, including rebuttal of Appellants' evidence.
8	2.	Brennon Staley, OPCD. Mr. Staley is a Strategic Advisor at OPCD. Mr. Staley was
9		involved in preparing Appendices E and H. He may be called to provide fact testimony
10		regarding those matters and others, including MHA payment and performance
11		requirements and modeling as to various aspects of the proposal, including rebuttal of
12		Appellants' evidence.
13	3.	Nick Welch, OPCD. Mr. Welch is a Strategic Advisor at OPCD. He had significant
14		involvement in the preparation of various sections of the EIS, including Appendices G,
15		H, and M. He may be called to provide fact testimony regarding those matters and
16		others, including growth estimates and the Seattle 2035 Growth and Equity Analysis,
17		and rebuttal of Appellants' evidence.
18	4.	Emily Alvarado, OH. Ms. Alvarado is Manager of Policy and Equitable Development
19		in the Office of Housing. Ms. Alvarado was involved in preparing Appendices E and H.
20		She may be called to provide fact testimony regarding those matters and others,
21		including the production of affordable units through MHA, the distribution of such units,
22		OH's affordable housing development efforts, and rebuttal of Appellants' evidence.
23		

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 3

5. Jesseca Brand, Department of Neighborhoods. Ms. Brand is Strategic Initiatives Advisor in the Department of Neighborhoods. She was involved in the community process addressed in Appendix B of the EIS and was one of the preparers of that appendix and Appendix H. She may be called to provide fact testimony regarding those matters, community outreach and input and rebuttal of Appellants' evidence.

6. Leslie Brinson Price, Mayor's Office. Ms. Brinson Price is a Senior Policy Advisor in the Mayor's Office. She may be called to provide fact testimony regarding the HALA process, the "Grand Bargain," the Mayor's "Action Plan," and other matters, including rebuttal of Appellants' evidence.

- 7. Richard Weinman, Weinman Consulting LLC. Mr. Weinman is the principal of Weinman Consulting LLC and was an advisor on and reviewer of various portions of the EIS. He may be called to provide fact and/or expert testimony regarding the description of the proposal, the alternatives analysis in the EIS, the adequacy of the analysis in the EIS, other SEPA matters, and rebuttal of Appellants' evidence. A copy of his resume is attached.
- 8. Chris Mefford, Community Attributes, Inc. Mr. Mefford is President and CEO of CAI and was involved in preparing CAI's November, 2016, Economic Analysis of MHA. He may be called to provide fact and/or expert testimony regarding the economic feasibility of MHA requirements, as well as other housing market and economic matters and rebuttal of Appellants' evidence. A copy of his resume is attached.
- Elliot Weiss, Community Attributes, Inc. Mr. Weiss is a Senior Planning Analyst at CAI and was involved in preparing CAI's November, 2016, Economic Analysis of MHA. He may be called to provide fact and/or expert testimony regarding the

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 4

economic feasibility of MHA requirements, as well as other housing market and economic matters and rebuttal of Appellants' evidence. A copy of his resume is attached.

- 10. Kevin Ramsey, BERK Consulting. Mr. Ramsey is a Senior Associate at BERK Consulting. Mr. Ramsey was an author and reviewer of the Housing and Socioeconomics section in the EIS and Appendices I and M. He may be called to provide fact and/or expert testimony regarding the Housing and Socioeconomics analysis in the EIS and rebuttal of Appellants' evidence. A copy of his resume is attached.
- 11. Kevin Gifford, BERK Consulting. Mr. Gifford is a Senior GIS and Data Analyst at BERK Consulting. Mr. Gifford was an author and reviewer of the Land Use and Aesthetics sections of the EIS. He may be called to provide fact and/or expert testimony regarding the Land Use and Aesthetics analyses in the EIS and rebuttal of Appellants' evidence. A copy of his resume is attached.
- 12. Expert witness, to be determined. OPCD reserves the right to call an additional fact and/or expert witness to address economic issues related to displacement and/or to rebut Appellants' evidence and testimony of Appellants' witnesses.
- 13. Ariel Davis, Fehr & Peers. Ariel Davis is a Transportation Planner with Fehr & Peers. She may be called to provide fact and/or expert testimony regarding the potential transportation impacts and analysis for the non-project citywide MHA proposal and rebuttal of Appellants' evidence. Ms. Davis was the primary author of the transportation chapter of the EIS. A copy of her resume is attached.

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 5

14. Katie Wilson, ESA. Katie Wilson is a historic resources consultant with

Environmental Science Associates ("ESA"). She may be called to provide fact and/or
expert testimony regarding the potential historic resources impacts and analysis for
the non-project citywide MHA proposal and rebuttal of Appellants' evidence. Ms.
Wilson was the primary author of the historic resources chapter of the EIS. A copy of
her resume is attached.

- 15. Paula Johnson, ESA. Paula Johnson is a historic resources consultant with ESA. She may be called to provide fact and/or expert testimony regarding the potential historic resources impacts and analysis for the non-project citywide MHA proposal and rebuttal of Appellants' evidence. Ms. Johnson was a reviewer of the historic resource analysis. A copy of her resume will be provided under separate cover.
- 16. Sharese Graham, ESA. Sharese Graham is a project manager for ESA. She may be called upon to provide fact and/or expert testimony regarding the potential impacts on biological resources, open space and recreation, public services and utilities, air quality and greenhouse gas emissions as a result of the non-project citywide MHA proposal, and rebuttal of Appellants' evidence. Ms. Graham was a contributing author and the reviewer of chapter 3.5 (historic resources), chapter 3.6 (biological resources), chapter 3.7 (open space and recreation), chapter 3.8 (public services and utilities), and chapter 3.9 (air quality and greenhouse gas emissions). A copy of her resume is attached.
 - 17. Mark Johnson, ESA. Mark Johnson is a project director for ESA. He may be called upon to provide fact and/or expert testimony regarding the potential impacts on biological resources, open space and recreation, public services and utilities, air

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 6

quality and greenhouse gas emissions as a result of the non-project citywide MHA proposal, and rebuttal of Appellants' evidence. Mr. Johnson was a reviewer of chapter 3.5 (historic resources), chapter 3.6 (biological resources), chapter 3.7 (open space and recreation), chapter 3.8 (public services and utilities), and chapter 3.9 (air quality and greenhouse gas emissions). A copy of his resume is attached.

- 18. Ilon Logan, ESA. Ilon Logan is an environmental consultant for ESA. She may be called upon to provide fact and/or expert testimony regarding the biological resources impacts and analysis for the non-project citywide MHA proposal and rebuttal of Appellants' evidence. Ms. Logan was the lead author of the critical areas sections of chapter 3.6 biological resources. A copy of her resume is attached.
- 19. Mike Leech, ESA. Mike Leech is a GIS director for ESA. He may be called upon to provide fact and/or expert testimony regarding the use of GIS in the biological resources impact analysis and rebuttal of Appellants' evidence. A copy of his resume is attached.
- 20. Daniel Sloat, ESA. Daniel Sloat is an air quality consultant from the San Francisco Office of ESA. He may be called to testify regarding the potential impacts to air quality and greenhouse gas emissions from the non-project citywide MHA proposal and rebuttal of Appellants' evidence. Mr. Sloat is the primary author of chapter 3.9 of the EIS, air quality and greenhouse gas emissions impact analysis. A copy of his resume will be provided under separate cover.
- 21. Witness to be determined. The City may call one or more expert witnesses to testify in rebuttal to expert testimony and evidence presented by the Appellants. In several instances Appellants have not disclosed the names of expert witnesses, have not

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 7

provided credentials, or have included generalized descriptions of their testimony such that the City cannot yet meaningfully evaluate the witnesses it may call in response.

22. Witness to be determined. The City may call one or more fact and/or expert witnesses to testify in rebuttal to testimony and evidence presented by the Appellants related to undisclosed impacts to specific neighborhoods. In several instances Appellants have not specified the neighborhood-specific impacts witnesses intend to address. Accordingly, the City cannot meaningfully evaluate the witnesses it may call in response.

II. EXHIBITS

The City reserves the right to submit a final list consistent with the case schedule that adds or deletes any exhibits identified herein. Additionally, the City reserves the right to: (1) offer any exhibit produced by any party in discovery; (2) offer any exhibit identified by another party; (3) offer any rebuttal exhibits as allowed by the Hearing Examiner; and, (4) offer illustrative exhibits.

1. Draft and Final Citywide Implementation of Mandatory Housing Affordability Environmental Impact Statements, and all appendices thereto.

2. All documents and data referenced in or supporting the conclusions in the DEIS, FEIS, and appendices thereto.

3. MHA Development Capacity Calculation (EIS spreadsheet with growth and MHA estimates)

4. Resolution 31546

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 8

1	5. Seattle Housing Affordability and Livability Agenda, Final Advisory Committee			
2	Recommendations to Mayor Edward B. Murry and the Seattle City Council, July 13,			
3	2015			
4	6. Housing Seattle: A Roadmap to an Affordable and Livable City, An Action Plan to			
5	Address Seattle's Affordability Crisis, July 13, 2015, Proposed by Mayor Ed Murray			
6	7. Map: Housing Affordability & Livability Agenda (HALA) Proposed Areas With New,			
7	Mandatory Affordable Housing			
8	8. Statement of Intent for Basic Framework for Mandatory Inclusionary Housing and			
9	Commercial Linkage Fee, July 13, 2015			
10	9. Resolution 31622			
11	10. Resolution 31612			
12	11. Ordinance 124895 and all Council Bills leading up to that Ordinance			
13	12. Ordinance 125108 and all Council Bills leading up to that Ordinance			
14	13. Community Attributes, Inc., Technical Memorandum Re: Economic Analysis of MHA,			
15	November 29, 2016			
16	14. CAI Economic Analysis Pro Forma Model			
17	15. MHA Production Model spreadsheet, version 1b, and earlier production modeling			
18	spreadsheets (aka "Development Driven Strategy Master") as needed			
19	16. Seattle Residential Affordable Housing Impact and Mitigation Study, DRA, December			
20	16, 2016, and earlier versions			
21	17. July 8, 2016, City Council briefing presentation to PLUZ Committee			
22	18. Seattle Office of Housing, 2017 Investment Report, Incentive Zoning and Mandatory			
23	Housing Affordability, March 2018			
	OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 9 Peter S. Holmes			

1	19. Housing Funding Policies, Seattle Office of Housing			
2	20. All notices related to scoping, the DEIS, and FEIS			
3	21. Seattle 2035 Comprehensive Plan			
4	22. Seattle 2035 Comprehensive Plan DEIS and FEIS			
5	23. Resolution 31762			
6	24. Proposed 2018 Comprehensive Plan amendments related to MHA, as introduced			
7	25. Analysis and Decision of the Director of DPD; SEPA Threshold Determination for the			
8	Affordable Housing Mitigation Program and Incentive Zoning Update; and			
9	Comprehensive Plan Amendments Regarding Affordable Housing, June 8, 2015			
10	26. Letter from Toby Thaler to Seattle City Council, August 14, 2016			
11	27. Email from Rob Johnson to Jef Jaisun, August 22, 2016			
12	28. All materials referenced and/or listed as references in Appendix I to the EIS			
13	29. Ordinance 125429			
14	30. Council Bill 119184			
15	31. Development Capacity Report: Updating Seattle's Comprehensive Plan, City of Seattle,			
16	2014			
17	32. City of Seattle Equitable Development Implementation Plan			
18	33. Seattle Pedestrian Master Plan;			
19	34. Seattle Bicycle Master Plan;			
20	35. Seattle Bicycle Master Plan – Implementation Plan 2017 – 2021;			
21	36. Seattle Transit Master Plan;			
22	37. Vision Zero Action Plan;			
23	38. Vision Zero Progress Report;			
	OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 10 Peter S. Holmes Seattle City Attorney			

1	39. Move Seattle – 10 year Strategic Vision for Transportation;			
2	40. Transportation Strategic Plan 2005 Update;			
3	41. 2017-2022 Capital Improvement Program;			
4	42. Seattle Freight Master Plan;			
5	43. Quantifying Greenhouse Gas Mitigation Measures (California Air Pollution Control			
6	Officers Association);			
7	44. Seattle 2035 Comprehensive Plan: Managing Growth to Become an Equitable and			
8	Sustainable City;			
9	45. Ordinance 122386 – Seattle Complete Streets Policy;			
10	46. 2016 Commute Seattle Center City Mode Split Survey;			
11	47. Seattle 2005 Comprehensive Plan Update: Toward a Sustainable Seattle;			
12	48. Bridging the Gap 2015 Annual Report;			
13	49. On-Street Paid Parking Occupancy 2016 Annual Report;			
14	50. On-Street Paid Parking Occupancy 2017 Annual Report;			
15	51. Moving the Needle (Office of Sustainability and Environment, 2014);			
16	52. 2015 Ramp and Roadway: Northwest Region Average Daily Volumes (WSDOT);			
17	53. Travel Demand Model Flow Chart (to be prepared by City's transportation expert			
18	witness);			
19	54. King County Metro Right Sized Parking Final Report;			
20	55. SDCI Director's Report and Recommendation to approve Neighborhood Parking			
21	Reform;			
22	56. Neighborhood Parking Presentation by SDCI on 2/8/2018;			
23	57. Ordinance # adopted 4/2/18 – Neighborhood parking reform;			
	Deter S Helmes			

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OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 11

1	58. Seattle Annexation List;
2	59. Department of Archaeology and Historic Preservation – Online Statewide Predictive
3	Model;
4	60. Secretary of the Interior's Standards for the Treatment of Historic Properties with
5	Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic
6	Buildings;
7	61. Early Neighborhood Historic Resources Survey Report and Context Statement
8	(Lange and Veith);
9	62. First Hill: An Inventory of Buildings and Urban Design Resources (Folke and
10	Steinbrueck);
11	63. Public Works in Seattle: A Narrative History of the Engineering Department 1875 –
12	1975 (Phelps);
13	64. Historic Property Survey Report: Seattle's Neighborhood Commercial Districts.
14	(Sheridan);
15	65. Survey Report: Comprehensive Inventory of City-Owned Historic Resources
16	(Wickwire);
17	66. Unreinforced Masonry Policy Committee – Recommendations to the City of Seattle;
18	67. Seattle Historic Preservation Program – Complete library of Historic Resources
19	Context Statements and Historic Resources Survey Database available on the
20	Department of Neighborhood's Historic Preservation Program website;
21	68. Director's Report and Recommendation in support of Environmentally Critical Areas
22	Ordinance No. 125248;
23	

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 12

1	69. Mayor's Executive Order 2017-11 – Improving protections for urban trees and			
2	canopy cover;			
3	70. Urban Forest Stewardship Plan;			
4	71. 2016 Tree Canopy Assessment Executive Summary;			
5	72. 2016 LiDAR Canopy Cover Assessment Slideshow Presentation;			
6	73. Seattle's Forest Ecosystem Values;			
7	74. Street Tree Management Plan;			
8	75. Duwamish River Cumulative Health Impacts Analysis;			
9	76. Tree Regulations Research Project – Phase II Final Findings and Recommendations;			
10	77. SDOT Street Tree Manual;			
11	78. SDCI Director's Rule 10-2006 – When administrative design review is required to			
12	save exceptional trees;			
13	79. SDCI Director's Rule 16-2008 – Designation of Exceptional Trees;			
14	80. Parks and Open Space Plan;			
15	81. Seattle Recreation Demand Study;			
16	82. Parks and Recreation 2011 Development Plan;			
17	83. Maps that depict city-wide zoning, parks, and urban villages, and other relevant data			
18	sets;			
19	84. 2017 Email Communication from Rebecca Asencio at Seattle Public Schools			
20	("SPS");			
21	85. SPS Facilities Master Plan;			
22	86. SPS Seattle School District No. 1 Student/Facility SF Allocation Summary;			
23	87. Seattle Comprehensive Drainage Plan;			
	OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 13 Peter S. Holmes Seattle City Attorney			

1	88. Seattle Wastewater System Master Plan;		
2	89. Seattle Plan to Protect Seattle's Waterways;		
3	90. King County Long Term Control Plan;		
4	91. King County Fact Sheet: 2018 CSO Long Term;		
5	92. Seattle's Washington State Municipal Stormwater Permit;		
6	93. Seattle Right of Way Improvement Manual;		
7	94. Washington State Department of Health Risk Assessment;		
8	95. Resolution 30144 – Seattle City Light long term net zero GHG emissions goal;		
9	96. Resolution 31312 – Seattle's long term climate protection vision;		
10	97. Seattle Community Greenhouse Gas Emissions Inventory;		
11	98. Bay Area Air Quality Management District (BAAQMD) Revised Draft Options and		
12	Justification Report;		
13	99. California Air Resources Board (CARB) Handbook;		
14	100. Seattle Community Greenhouse Gas Emissions Inventory;		
15	101. Federal Highway Administration (FHWA) 2016 Updated Interim Guidance on		
16	Mobile Source Air Toxic Analysis in NEPA Documents;		
17	102. King County Metro Transit Sustainability Plan;		
18	103. National Highway Traffic Safety Administration (NHTSA) EPA and DOT		
19	Finalize Greenhouse Gas and Fuel Efficiency Standards for Heavy-Duty Trucks;		
20	104. Port of Seattle, Port of Tacoma, Vancouver Port Authority, USEPA, and PSCAA		
21	Joint News Release: PNW Ports Join Forces to Reduce Maritime Emissions;		
22	105. PSCAA 2005 Air Emission Inventory for King, Kitsap, Pierce, and Snohomish		
23	Counties;		

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 14

1	106. PSCAA 2010 Study of Air Toxics in Tacoma and Seattle;		
2	107. PSCAA 2015 Air Quality Data Summary;		
3	108. Puş	get Sound Regional Council (PSRC) Macroeconomic Forecast;	
4	109. Sea	attle City Light (SCL) 2012 Integrated Resource Plan;	
5	110. Sea	attle Public Utilities (SPU) 2015 Recycling Rate Report;	
6	111. Sou	und Transit Sustainability Plan;	
7	112. U.S	S. EPA Clean Air Nonroad Diesel Rule: Fact Sheet;	
8	113. U.S	S. EPA Final Rule for Model Year 2012 – 2016 Light-Duty Vehicle	
9	Greenhouse Gas Emission Standards and Corporate Average Fuel Economy		
10	Standards;		
11	114. U.S	5. EPA Final Rule for 2017 and Later Light-Duty Vehicle Greenhouse Gas	
12	Emissions and Corporate Average Fuel Economy Standards;		
13	115. Wa	ashington State Department of Ecology (Ecology) Report to the Legislature on	
14	Washin	ngton Greenhouse Gas Emissions Inventory: 2010-2013;	
15	116. Eco	ology Nonattainment & Maintenance Areas (2017);	
16	117. Sea	attle Fire Department Annual Report 2016	
17	118. Sea	attle Fire Department Annual Report 2017	
18	119. Sea	attle Climate Action 2018	
19	120. All	materials submitted by the City in connection with any dispositive motions	
20	121. Re	levant documents produced in response to Appellants' discovery requests	
21	122. Re	sumes for all expert witnesses listed and/or called by the City	
22			
23			

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 15

DATED this 9th day of April, 2018.	
	PH

PETER S. HOLMES Seattle City Attorney

By: s/Jeff Weber, WSBA #24496 s/Daniel B. Mitchell, WSBA #38341 Assistant City Attorneys

> Attorneys for Respondent Seattle Office of Planning and Community Development

OPCD'S PRELIMINARY WITNESS AND EXHIBIT LIST - 16

1	CERTIFICATE OF SERVICE		
2	I certify that on this date, I electronically filed a copy of OPCD's Preliminary Witness		
3	and Exhibit List with the Seattle Hearing Examiner	r using its e-filing system.	(
4	I also certify that on this date, a copy of the same document was sent via email to the		
5	following parties:		
6 7	Wallingford Community Council c/o G. Lee Raaen <u>lee@lraaen.com</u>	Morgan Community Assoc c/o Deb Barker djb124@earthlink.net	iation (MoCA)
8 9	Friends of Ravenna-Cowen c/o Judith Bendich jebendich@comcast.net	West Seattle Junction Neig admin@wsjuno.org c/o Rich Koehler rkoehler@cool-studio.net	hborhood Org.
10 11 12 13	Coalition for Affordability, Livability, & Equity c/o Claudia Newman <u>newman@bnd-law.com</u> Peggy Cahill; <u>cahill@bnd-law.com</u> Bryan Telegin; <u>telegin@bnd-law.com</u>	Seniors United for Neighbo c/o David Ward booksgalore22@gmail.com	
14 15	Beacon Hill Council of Seattle c/o Mira Latoszek <u>mira.latoszek@gmail.com</u>	Friends of North Rainier N c/o Marla Steinhoff <u>masteinhoff@gmail.com</u>	eighborhood Plan
16 17 18	Fremont Neighborhood Council <u>fremont@louploup.net</u> c/oToby Thaler <u>toby@louploup.net</u>		
19	Dated this 9th day of April, 2018, at Seattle, Washington.		
20	Manuás	(phones	
21	Marisa Johnson		
22			
23			
	OPCD'S PRELIMINARY WITNESS AND EXHIBIT	CLIST - 17	Peter S. Holmes Seattle City Attorney

EXHIBIT A

Richard Weinman

Expertise

- Land Use & Environmental Analysis
- SEPA/NEPA
- GMA Planning & Development Regulations
- Regulatory Compliance & Permitting Strategies

Education

- J.D. Seattle University School of Law, 1978
- M.A. (English) Brandeis University, 1966
- B.A. (English) New York University, 1965
- Mediation skills training (40 hours) Univ. of Wash.School of Law, 1993

Experience

- SEPA/NEPA process management and compliance strategies.
- Project-level SEPA and NEPA EISs and permitting for master planned communities & resorts, shopping centers, mixed-use and transit oriented developments, shopping centers, mining operations, energy facilities, transportation and infrastructure projects, civic and institutional projects.
- Non-project SEPA documents and GMA compliance for comprehensive plans, city center and sub-area plans.
- Policy development for GMA comprehensive and sub-area plans and plan updates.
- Permitting strategies.
- Drafting and peer review of local ordinances, including zoning codes/classifications, shoreline master programs, wetland regulations, and critical area policies and regulations, planned action ordinances, development agreements and MOAs/MOUs.
- Peer review and staffing assistance for public agencies, including preparation of staff reports for development proposals.

Prior Experience

- Huckell/Weinman Associates, Inc., Senior Principal
- Northwest Land Use Review, Editor/Publisher
- Land Use Research Council, Executive Director

Professional Associations & Activities

- Washington State Bar Association Environmental & Land Use Section.
- American Planning Association Planning & Law Division; Washington chapter legislative committee.

Richard Weinman

Publications / Presentations

- SEPA Case Law Update (APA, 2014)
- Planned Action Training Workshop (WSDOT, 2012)
- EIS Design & Preparation (Law Seminars International, 2010)
- Planned Actions: How to Do It (APA Planning Conference, 2009)
- EIS Design & Preparation (Law Seminars International, 2009)
- EIS Design & Preparation (Law Seminars International, 2008)
- EIS Design & Preparation (Law Seminars International, 2007)
- Land Use & Environmental Due Diligence & Compliance (Law Seminars International, 2006)
- The Latest Word on Compliance with SEPA & NEPA (The Seminar Group, 2006)
- Regulatory Requirements & Permitting for Essential Public Facilities (The Seminar Group, 2004)
- Planned Action EISs (APA Planning Law Conference, 2001)
- Planned Actions: Making Development Happen (WA Dept of Community Development, 2000)
- Integrating Planning with SEPA/NEPA (WA Public Transportation & Rail Conference, 1997)
- Fiscal Impact Analysis Intel Case Study (APA, 1996)
- Evolution of Planning in Washington (WA Public Ports Assoc. Seminar, 1994)
- Non-Project EISs (EIS Issues conference, 1994)
- Juggling Planning, Policies & Science: Drafting Sensitive Area)
- Regulations (CLE International, Conference Proceedings, 1993)
- Wetland Incentives: Non-Regulatory Techniques for Wetland Protection (NAIOP, PSWQA, 1993)
- Programmatic EISs: Advancing the State of the Art (EIS, SEPA/GMA Conference, 1992)
- SEPA/GMA Conference Proceedings, 1992
- Water Quality Swales Guidebook (NAIOP, PSWQA, 1991)
- Eastside Land Use Issues (Puget Sound Business Journal, 1989)
- Eastside Industrial Land Supply (NAIOP, 1988)
- Environmental Impacts Under Washington's SEPA (NY State Bar/CEQ, 1987)
- New SEPA Rules (NW Land Use Review, 1986)
- Wetlands Regulations (NW Land Use Review, 1986)
- Planned Communities (NW Land Use Review, 1985)
- Land Use in Washington: A Survey of Counties (1984)

EXHIBIT B



EDUCATION MBA: University of Washington

MS: Urban and Regional Planning University of Iowa (Economics minor)

BA: Mathematics University of Northern Iowa (Economics minor)

CHRIS MEFFORD President and CEO

Chris founded Community Attributes Inc. in 2005. He excels in working with jurisdictions on economic development and planning projects, providing market and feasibility analyses; economic and financial analysis; and policy analysis, including land use and transportation policies. Currently, Chris serves on a labor market advisory panel for Washington STEM, providing expertise in workforce data and analysis. He brings more than 25 years of experience in consulting, project management, and analysis of regional economies, land use and transportation patterns. He often speaks to audiences about the regional economy and community development considerations. Chris is an expert in regional economic development, socio-economic and demographic analysis, financial feasibility analysis, geographic information systems modeling and mapping, and transportation planning.

REPRESENTATIVE EXPERIENCE

KING COUNTY Regional Housing Affordability Task Force Facilitation King County, WA | 2017-Ongoing

CITY OF SEATTLE OFFICE OF PLANNING & COMMUNITY DEVELOPMENT Seattle Mandatory Housing Affordability Economic Viability Analysis Seattle, WA | 2016 - 2017

CITY OF SEATTLE CITY COUNCIL

South Lake Union Housing Demand Analysis Seattle, WA | 2013

CITY OF BOTHELL

Transfer of Development Rights and LCLIP Analysis Bothell, WA | 2013

CITY OF ASTORIA, OREGON

Five-Year Economic Development Strategy Astoria, OR | 2017

CITY OF BELLEVUE

Eastgate Market Analysis Bellevue, WA | 2014 - 2015

CITY OF SEATTLE University District Market Analysis Seattle, WA | 2015 CITY OF SAMMAMISH LCLIP Evaluation & Feasibility Analysis Sammamish, WA | 2013

OKANOGAN COUNTY ECONOMIC RECOVERY PLAN AND WEBSITE North Central Washington Economic Development District Okanogan County | 2015–2016

PUGET SOUND REGIONAL COUNCIL Regional Economic Strategy Puget Sound, WA | 2016 - 2017

PORT OF OLYMPIA Tumwater Properties Master Plan Port of Olympia, WA | 2015

ECONOMIC ALLIANCE SNOHOMISH COUNTY Stillaguamish Valley Economic Redevelopment Plan

North Stillaguamish Valley, WA | 2015

CITY OF McMINNVILLE Economic Development Strategy McMinnville, OR | 2018 - Ongoing

EXHIBIT C



EDUCATION Master of Urban and Regional Planning University of Michigan

Certificate in Real Estate Development University of Michigan

BA: Political Science and International Studies, University of Iowa

ELLIOT WEISS | AICP Senior Planning Analyst

Elliot brings expertise as a planning consultant with award-winning work in urban design and community engagement. His academic and professional background cultivates expertise in policy analysis, urban economics, financial modeling and fiscal impact analysis, land use planning and zoning analysis, place making and economic development, outreach and facilitation and project management. At CAI, Elliot contributes his skills in land use planning, economic development action plans, development feasibility analysis, and digital 3D modeling and rendering. Elliot was instrumental in creating an Economic Redevelopment Plan for Snohomish County following a 2014 landslide, which recently won the Puget Sound Regional Council's Vision 2040 Award. He has a passion for urban issues and an interest in how cities function as hubs for cultural exchange and socioeconomic transformation. He spent a year working for Americorps on projects involving energy-efficient affordable housing, community development and alternative transportation in under-served urban areas.

REPRESENTATIVE EXPERIENCE

CITY OF BELLEVUE Eastgate Market Analysis Bellevue, WA | 2014 - 2015

CITY OF SEATTLE University District Market Analysis Seattle, WA | 2015

CITY OF SEATTLE

Seattle Mandatory Housing Affordability Economic Viability Analysis Seattle, WA | 2016 - Ongoing

CITY OF BOTHELL Transfer of Development Rights Analysis Seattle, WA | 2013

CITY OF SAMMAMISH LCLIP Evaluation & Feasibility Analysis Sammamish, WA | 2013

CITY OF LACEY Woodland District Form-Based Code Lacey, WA | 2015

BLUME COMPANY Development Feasibility Study Seattle, WA | 2015 SAN JUAN COUNTY Comprehensive Plan San Juan County, WA | 2017

CITY OF ASTORIA Five-Year Economic Development Strategy Astoria, OR | 2017

PUGET SOUND REGIONAL COUNCIL Regional Economic Strategy Puget Sound, WA | 2016 - 2017

PORT OF OLYMPIA Tumwater Properties Master Plan Port of Olympia, WA | 2015

ECONOMIC ALLIANCE SNOHOMISH COUNTY Stillaguamish Valley Economic Redevelopment Plan North Stillaguamish Valley, WA | 2015

CITY OF MCMINNVILLE Economic Development Strategy McMinnville, OR | 2018 - Ongoing

EXHIBIT D

KEVIN RAMSEY

4319 Thackeray Pl NE; Seattle WA 91805 · 206.713.4977 ksramsey@gmail.com · https://www.linkedin.com/in/kevin-s-ramsey/

EXPERIENCE

2014 – PRESENT

SENIOR ASSOCIATE, BERK CONSULTING

I am a senior policy analyst and project manager with expertise in land use, housing, demographic analysis, and GIS. My work involves engaging local governments and community stakeholders to assess complex challenges and evaluate strategies for pursuing sustainable and equitable development. Recent project experience includes:

- Seattle Mandatory Housing Affordability Environmental Impact Statement
- Seattle Uptown Urban Center Rezone Environmental Impact Statement
- Seattle Parks Impact Fee Rate Study
- Edmonds Housing Strategy
- King County Cedar River Corridor Planning and Capital Investment Strategy
- King County Water Taxi Ridership Forecast and Fare Policy Study
- Kitsap County Reasonable Measures Evaluation
- Kittitas County Land Capacity Analysis and Demographic Forecast
- Renton Regional Fire Authority Capital Facilities Plan and Impact Fee Rate Study
- South Snohomish County Fire & Rescue Regional Fire Authority Capital Facilities Plan
- Whatcom County Comprehensive Plan
- WSDOT Independent Land Use Forecast Review and Adjustment
- Housing Needs Assessments for the Cities of Ellensburg, Wenatchee, and Leavenworth

2010 - 2014

POLICY RESEARCH FELLOW, U.S. EPA SMART GROWTH PROGRAM

I oversaw research and development activities that produced spatial data, models, and tools for supporting land use, transportation, and environmental impact analysis. I was also highly engaged in the HUD-DOT-EPA Partnership for Sustainable Communities (PSC) which identified innovative strategies for helping communities to manage growth through integrated land use, housing, and transportation policies. Project experience included:

- GSA Smart Location Calculator and EPA Smart Location Database
- HUD/DOT Location Affordability Portal
- EPA Residential Construction Trends in America's Metropolitan Regions

2002 - 2009

LECTURER, RESEARCH ASSISTANT, AND PHD STUDENT, UW

As a graduate student I worked on several research studies and taught seven courses at the UW Bothell campus. Project experience included:

- Urban Environmental Governance and the Politics of Mobility in Seattle
- A Resource Planning Index for Washington's Scenic and Recreational Highways
- Participatory GIS for Transportation
- Idaho Department of Water Resources, Thousand Springs surface water model

2001 – 2002 PROGRAM COORDINATOR, SIERRA CLUB

1999 - 2000 ASSOCIATE PRODUCER FOR ONLINE COMMUNITY, TECH TV

1998

RESEARCH ASSOCIATE, INTERVAL RESEARCH CORPORATION

EDUCATION

2004 & 2009

MA & PHD, GEOGRAPHY, UNIVERSITY OF WASHINGTON

1997

BS, RADIO/TV/FILM, NORTHWESTERN UNIVERSITY

SKILLS AND EXPERTISE

- Project management
- Quantitative research methods
- Geographic Information Systems
- Database management and analysis
- Demographic analysis

- Washington State Growth Management Act
- Land use planning and policy interpretation
- Housing policy
- Working with elected officials
- Presenting information to the public

ACTIVITIES AND AWARDS

- President's Volunteer Service Award, The White House
- Member, Location and Planning Technical Advisory Group, US Green Building Council
- Technical Review Liaison, Transit Cooperative Research Program (TCRP) H-46, Quantifying Transit's Impact on GHG Emissions and Energy Use: The Land Use Component
- Federal Technical Review Panelist, HUD-DOT Housing + Transportation Affordability Initiative
- National Advisory Panelist, HUD's Healthy Community Transformation Initiative
- Advisory Panelist, Penn Institute for Urban Research Sustainable Community Indicator Catalog
- Co-Chair, HUD-DOT-EPA Partnership for Sustainable Communities Working Group on Performance Measurement
- Grant proposal reviewer, HUD Community Challenge Grant
- Grant proposal reviewer, HUD Sustainable Communities Research Grant Program
- University of Washington Graduate School Dissertation Fellowship
- Fellow, Project for Interdisciplinary Pedagogy, UW Bothell
- Fellow, Simpson Center Institute on the Public Humanities, UW
- Nine peer-reviewed publications in academic journals and edited volumes
- Award for Excellence in Computer Art, Northwestern University Department of Radio/TV/Film

EXHIBIT E

KEVIN GIFFORD

EXPERIENCE

SENIOR GIS & DATA ANALYST, BERK CONSULTING; SEATTLE, WA – 2016-2018
Provide primary geospatial and data analysis for public policy projects, including land use plans, economic development plans, land development capacity studies, and environmental impact studies.

- Lead preparation of SEPA Environmental Impact Statement analyses for land use planning projects, including evaluation of land use and aesthetic impacts.
- Design and deploy GIS mapping and analysis tools, interactive web mapping applications, and synthesis and analysis of spatial databases.

SENIOR PLANNER, BERK CONSULTING; SEATTLE, WA - 2013-2016

- Managed project teams of policy analysts and land use planners to prepare environmental impact analyses, shoreline master programs, land use plans, and economic development studies for public sector clients throughout Washington State.
- Authored SEPA and NEPA Environmental Impact Statement analyses for land use planning projects, including evaluation of land use and aesthetic impacts.
- Prepared comprehensive plan amendments and supporting analyses for City and County clients to ensure compliance with the Growth Management Act.
- Prepared spatial analysis and GIS mapping products to support land use planning and economic development analysis projects.

LAND USE PLANNER, AHBL, INC; SEATTLE, WA - 2011-2013

- Prepared land use plans and subarea plans under the Growth Management Act and City and County shoreline master program updates under the Shoreline Management Act.
- Authored SEPA and NEPA Environmental Impact Statement analyses for land use planning and civil engineering projects.
- Prepared spatial analysis and GIS mapping products to support land use planning, civil engineering, and environmental analysis projects.

URBAN PLANNER, ICF INTERNATIONAL; SEATTLE, WA - 2006-2011

- Authored SEPA, CEQA, and NEPA Environmental Impact Statement analyses for land use planning, transportation, and utility infrastructure projects.
- Prepared applications for State and Federal environmental permits, including U.S. Army Corps of Engineers permits (Section 10, Section 404), WDFW Hydraulic Project Approval, and local shoreline development permits.
- Prepared GIS mapping and analysis; acted as regional GIS team coordinator, managing workload for up to ten GIS staff in three offices.

2025 1st Avenue, Suite 800; Seattle, WA 206-324-8760 www.linkedin.com/in/ksgifford

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY; BERKELEY, CA MASTER OF INFORMATION & DATA SCIENCE, 2019 (ANTICIPATED)

TEXAS A&M UNIVERSITY; COLLEGE STATION, TX MASTER OF URBAN PLANNING, 2006

TEXAS A&M UNIVERSITY; COLLEGE STATION, TX BACHELOR OF ENVIRONMENTAL DESIGN, 2004

SKILLS & EXPERTISE

• Land Use Planning (Growth Management Act, zoning/development code administration)

- Environmental Planning (Shoreline Management Act, SEPA, NEPA, CEQA)
- Environmental Permitting (Clean Water Act, Rivers and Harbors Act, JARPA process)
- ESRI ArcGIS
- Digital modeling and Visual Analysis (SketchUp, ArcScene)
- Statistical modeling and inference
- Programming and Web Design (Python, JavaScript, HTML, CSS)

EXHIBIT F



Ariel Davis, AICP

Associate

<u>about</u>

Ariel Davis is an Associate with a Master's degree in Transportation Engineering from the University of Washington. Ariel specializes in managing the transportation components of SEPA projects including both programmatic and project level Environmental Impact Statements. Ariel managed Seattle's University District Urban Design EIS, Citywide Mandatory Housing Affordability (MHA) EIS, MHA Program Evaluation for Downtown Seattle and South Lake Union, and the Seattle Comprehensive Plan Update EIS. Ariel has also worked on EIS documents for jurisdictions throughout the Puget Sound including Kent, Lakewood, Tacoma, Bellevue, Lake Stevens, and Snohomish County.

<u>education</u>

- M.S. in Transportation Engineering, University of Washington
- B.A. in Mathematics, Whitman College, WA

registrations

- American Institute of Certified Planners, 2016 affiliations
- Women's Transportation Seminar (WTS), Puget Sound Chapter Treasurer

relevant projects

Snohomish County Comprehensive Plan Update EIS

Lead author of the transportation chapter of the Snohomish County Comprehensive Plan Update EIS. The update was based on a detailed evaluation of over 500 County, City, and State owned roadway segments using the Snohomish County travel demand model developed by Fehr & Peers for this project.

Seattle Comprehensive Plan EIS

Managed the transportation component of the Seattle Comprehensive Plan EIS as a subconsultant. Evaluated five future year land use alternatives using innovative metrics including travel time, VMT per capita, trip length, walksheds, and mode share. Analysis included travel demand forecasting and evaluation of all modes, as well as a greenhouse gas evaluation.

University District Urban Design EIS

Managed transportation analysis as a subconsultant to Studio 3MW. The U District is adjacent to the University of Washington, Seattle and houses primarily university students. A critical piece of this project is development of travel demand forecasts, which incorporate Fehr & Peers' enhanced trip generation tool with the City's travel demand model. Other components include roadway, transit, and parking analyses as well as a mitigation feedback assessment. Lead author of the transportation chapter for EIS.

Kent Downtown Subarea Action Plan

Conducted an analysis of transportation needs in downtown Kent as part of the Downtown Subarea Action Plan. The city's travel demand model was updated with new land use forecasts for downtown Kent and surrounding areas. The analysis evaluated impacts on traffic level of service and proposed inclusion of multimodal levels of service for pedestrians, bicycles, and transit. The results were documented in a report that formed the basis for a proposed planned action ordinance covering a major portion of downtown Kent.



Seattle | Denver | Honolulu | Oakland | Orange County | Roseville | Sacramento | Salt Lake City San Diego | San Francisco | San José | Walnut Creek | Washington D.C. 1001 4th Avenue Suite 4120 Seattle, WA 98154 206.576.4220

EXHIBIT G





EDUCATION

B.A., Marine Biology, U.C. Santa Cruz

Undergraduate Thesis: An evaluation of the effects of produced water on the infaunal species Tellina carpenteri using the BACIPS design.

16 YEARS OF EXPERIENCE

CERTIFICATIONS

Project Management Professional

PROFESSIONAL AFFILIATIONS

National Association of Environmental Professionals

Sharese Graham, PMP

Senior Planner

With a background in both urban planning and biology, Sharese brings 16 years of experience in environmental impact analysis, master planning, federal and regional permitting, natural resource management, and urban planning research. She has assisted both private and public sector clients with recreation, transportation, utility, and development projects. Her expertise in environmental analysis has contributed to a wide variety of State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) documents, including projects for local, regional, state and federal agencies. Sharese's experience in project and resource management has contributed to general and master plans, long-range mitigation monitoring programs, and transportation and water augmentation projects.

Employment History

2006 – present Managing Associate, ESA. Sharese is a Senior Planner whose main focus is project management for community development, transportation, and resource projects throughout the northwest. Projects include environmental and regulatory compliance for infrastructure projects, and assisting local governments with comprehensive and subarea planning and land use code development.

2000 – 2004 Associate Planner, Denise Duffy & Associates, Monterey, CA. Sharese performed a variety of tasks as an associate planner for this environmental consulting firm. Her duties included researching, writing and editing state and federal environmental compliance documentation, project management, in-field condition compliance monitoring, federal and regional regulatory permitting, and graphics preparation.

Relevant Experience

City of Lake Stevens Downtown Subarea Plan EIS. *Project Manager.* The City of Lake Stevens is preparing a subarea plan for future redevelopment of their downtown core. Sharese is managing the preparation of the SEPA Environmental Impact Statement (EIS). She is also participating in public outreach efforts and coordinating with the design team and other subconsultants. The main environmental issues for the downtown subarea are stormwater, wetlands, and traffic.

Review of Navy Military Training NEPA EIS for the Commonwealth of the Northern Mariana Islands, Mariana Islands, Western Pacific. *Project Planner.*

ESA was requested by the Dentons law firm to assist them in providing an official government response to a Navy Training EIS that would make use of two islands within the Commonwealth of the Northern Mariana Islands (CNMI). Sharese made a trip to Saipan to conduct meetings with staff from

the Governor's office, various agency directors, legislators, stakeholders, and the public to obtain a full understanding of the issues and concerns of the CNMI. Field visits were conducted to review the existing conditions and effects of proposed facilities and training activities. Extensive meetings with the press were conducted to assist the CNMI in educating the public on the issues of the project. As the public outreach lead, Sharese and another ESA staff member conducted three public meetings – two on the main island of Saipan and one on the affected island of Tinian. ESA's technical review of the biological, physical, and cultural resource issues was a primary component of the official CNMI Office of the Governor's response to the proposed action.

Clark County Comprehensive Plan Update EIS, Clark County, WA. *Project Manager.* Sharese assisted Clark County in a major update of their Comprehensive Plan to comply with the GMA. ESA prepared the EIS to evaluate impacts and identify mitigation strategies. The EIS evaluated four alternatives, including a No Action Alternative, an alternative for adding to the existing Urban Growth Areas, and two options for potential re-zoning.

Seattle School District BEX IV EIS, King County, WA. Deputy Project Manager. ESA completed preparation of the EIS addressing Seattle Schools' \$650 million Building Excellence (BEX) Phase IV capital program, and successfully defended it under appeal. Improvements at over 20 schools in neighborhoods throughout Seattle are proposed. Sharese led the preparation and publication of the SEPA EIS. Sharese and the ESA team are continuing with project-level SEPA documentation during implementation of BEX IV.

Cowlitz County Millennium Review, WA. *Project Manager.* This sole source project was the result of a request by Cowlitz County and involved redevelopment of a private industrial port site and an expansion of bulk materials handling operations. This complex project involved clean-up of a site contaminated by a former tenant, remediation of permit violations, maintenance of existing facilities, and expansion of the bulk materials handling operations. Sharese served as an extension of the County planning staff to review and process permit submittals, prepare SEPA compliance documents, and work closely with the County, Agencies, legal counsel and the applicant on remediation efforts.

Bellevue Eastgate Park Master Plan, WA. *Project Manager.* ESA assisted the City of Bellevue with development of a comprehensive master plan for 27 acres of property located within the I-90 business park. Some of the property is a former municipal landfill and an airfield and is rife with utility systems, a landfill gas migration system, monitoring wells, and sewer and stormwater systems. ESA helped with identifying opportunities and constraints, alternatives development, and SEPA compliance. As PM, Sharese lead preparation of the SEPA documentation for the project, as a subconsultant to the project landscape architect.

Ueland Tree Farm Mineral Resource Development EIS, Kitsap County, WA. *Project Planner.* Sharese assisted in preparation of the EIS by incorporating technical reports prepared by sub-consultants and through additional research and analysis. She was also a main point of contact for the client and project proponent. The project involves converting a portion of a working tree farm into a gravel and basalt surface mining operation. The project include construction of permanent operational facilities as well as incremental development and reclamation of several mining sites over a 50year period. Some of the main issues of concern included land use, noise, traffic, vegetation and wildlife, air quality, and water quality.

Northstar Chemical Facility Project EIS, Sumner, WA. *Deputy Project Manager.* ESA prepared the EIS for a proposed chemical storage and distribution center. This contentious project included an in-depth analysis of potential hazardous materials, land use, and traffic impacts, as well as extensive public involvement. Sharese led preparation of the EIS and coordination with the traffic subconsultant.

Sammamish Town Center EIS, Sammamish, WA. Project Planner. Sharese assisted in the preparation of the EIS for the development of a Town Center sub-area plan. She wrote the Earth and Public Services sections of the document and also performed on-site evaluations. The EIS was an integrated SEPA/GMA sub-area plan for the Sammamish Town Center. Environmental issues for this 240–acre study area included traffic, wildlife habitat protection, stormwater management, aquatic resource protection, and land use.

Des Moines Marina Master Plan Update, WA. *Project Manager.* Sharese managed the preparation of a SEPA Checklist for the Marina. The City of Des Moines prepared an update to the Marina Master Plan that included both short- and long-term improvement projects for operation of the marina and associated public facilities. She conducted an on-site evaluation, coordinated with City staff, completed the checklist, and tracked the project budget. The main issues for this project were marine, land use, and recreation impacts.

Seattle DPD Industrial Lands Survey, City of Seattle, WA. *Project Planner.* Sharese helped survey businesses located in Seattle's industrial zoned areas. The Seattle Department of Planning and Development compiled information on the current and foreseeable future needs of businesses located in areas zoned for industrial uses. Sharese conducted phone surveys and created a database to compile and report survey results.

Shoreline Master Program Update, City of Snohomish, WA. *Project Planner.* Sharese was an integral part of the preparation of the update to the City of Snohomish's SMP, last updated in 2000. She assisted with on-site analysis and development of a shoreline inventory and characterization report for the Snohomish and Pilchuck Rivers and Blackman's Lake. Sharese also worked on development of regulations, a restoration plan, and the cumulative impacts analysis.

Shoreline Master Program Update, Clark County, WA. *Project Planner.* Sharese is assisting in the preparation of the collective update of SMP's for Clark County and its GMA cities. Her role has been in various aspects of research and analysis, with a focus on land use and public access. She will continue to work on the SMP update assisting with development regulations.

Yakima River Basin Water Storage Feasibility Study EIS, WA. Project Planner. This project involved evaluating alternatives proposed by the state to improve water allocation in the Yakima River basin. ESA worked on the combined NEPA/SEPA Draft Planning Report/EIS prepared jointly by the Bureau of Reclamation and Ecology. Reclamation evaluated two off-stream reservoirs—Black Rock and Wymer. Ecology evaluated water conservation, water marketing, and ground water storage alternatives. The combined NEPA/SEPA Draft Planning Report/EIS was issued in January 2008. Sharese assisted the project manager with preparation of a separate SEPA Supplemental Draft EIS that evaluates an additional alternative that included an integrated strategy for water supply and habitat improvement projects in the Yakima River basin.

Cle Elum Fish Passage Facilities and Fish Reintroduction Project ElS, Kittitas County, WA. *Project Planner.* Sharese assisted in the production of the combined NEPA/SEPA EIS with Reclamation and Ecology. Reclamation was the lead for the fish passage facilities portion of the project and Ecology the SEPA lead for the fish reintroduction project developed by the Washington Department of Fish and Wildlife and Yakama Nation. Sharese assisted in the compilation of sections from the various authors, and provided editing and production help.

Columbia River Water Management Program Programmatic EIS, Yakima County, WA. *Project Planner.* Sharese provided planning assistance for the Washington State Department of Ecology's programmatic EIS on the Columbia River Water Management Program. The Management Program will implement legislation enacted in 2006 to improve water allocation in the Columbia River basin. Sharese assisted with project alternative analysis and preparation and production of the EIS issued in February 2007. The EIS includes an analysis of potential impacts of components of the Management Program on social, economic, and natural resources as well as policy alternatives for implementing the Management Program.

Lake Roosevelt Incremental Storage Releases Supplemental EIS, Yakima County, WA. Project Planner. This project included the development of a Supplemental EIS for the proposed drawdown of Lake Roosevelt. The drawdown is a component of the Columbia River Basin Water Management Program and will release additional water from Grand Coulee Dam to improve municipal and industrial water supply, provide water to replace some ground water use in the Odessa Subarea, enhance stream flows in the Columbia River to benefit fish, and provide water to interruptible water right holders in drought years. Sharese assisted in the assimilation of reports from the technical team into the EIS.

Watsonville Municipal Airport Master Plan Environmental Impact Report, Watsonville, CA. *Project Manager*. Sharese lead this highly controversial Airport Master Plan EIR. The key issues for this project were safety, noise, water supply, and biological resources. Sharese coordinated with the specialized consultant team, assisted in negotiations with the California Department of Fish and Game, and presented the EIR at several public hearings.

EXHIBIT H





EDUCATION

B.L.A., Landscape Architecture, University of Washington

30 YEARS OF

REGISTRATION

Professional Landscape Architect: WA #510

Mark S. Johnson, PLA

Senior Planner

Mark is a senior environmental planner and professional landscape architect with over 30 years of experience in planning, design, project management, and regulatory review. He is an expert in SEPA and NEPA document preparation and federal, state, and local environmental regulatory compliance. Mark is also an expert in permitting, especially for complex projects involving shorelines, wetlands, and other critical areas. Mark has also assisted jurisdictions with environmental policy and planning for shorelines and environmental critical areas, land use code development, including preparing shoreline master program updates for several cities and counties.

Employment History

2006 - present Planning Director, ESA. Mark manages a group of six planners and is also a project manager. Projects include environmental and regulatory compliance for infrastructure projects, and assisting local governments with comprehensive and subarea planning and land use code development.

2000 - 2006 Senior Environmental Planner, Herrera Environmental Consultants. Mark managed a group of up to eight planners and was also a project manager. Projects included environmental and regulatory compliance for infrastructure projects, and assisting local governments with subarea planning.

1990 – 2000 Senior Environmental Planner, City of Seattle Department of Design, Construction and Land Use (DCLU, now DCI). Mark managed a group of up to eight planners performing current planning review, with responsibility for approximately 300 discretionary land use decisions per year. Mark regularly defended City decisions in front of the Seattle Hearing Examiner and State Shoreline Hearings Board, and occasionally assisted in cases that were appealed to the courts.

1987 – 1990 Landscape Architect, The Berger Partnership. Mark designed residential and commercial landscapes primarily for private clients in the Puget Sound region.

1985 – 1986 Planning Intern, King County Parks, Planning, and Community Development Department. Assisted with development of the Open Spec element of the County's Comprehensive Plan.

Project Experience Examples

City of Seattle Department of Design, Construction, and Land Use Supervision. As a Supervising Land Use Planner, Mark supervised land use and environmental review of approximately one third of all development occurring in the City of Seattle. He also assisted in the development of the design review program now in place in Seattle, provided leadership and expertise on critical areas and shoreline policy issues, and analyzed some of the major projects built in the City in the 1990s. Major projects he analyzed include: Safeco Field, Southwest Harbor Redevelopment Project; Waterfront South (Colman Dock); Immunex (now Amgen), Quadrant Lake Union Center; Ballard Fred Meyer; Major Institution Master Plans for Seattle University, Seattle Pacific University, Providence Hospital, Harborview Hospital, Virginia Mason Hospital; Metro (Wastewater) West Seattle Force Main Tunnel Project; Westlake Hotel; and W Hotel; See Regulatory Review heading below for individual projects.

Environmental Permitting Guidebook for City of Seattle Departments (SDOT/SPU), WA. Mark was the project manager on this project to develop a Capital Improvement Project (CIP) Environmental Permit Guidebook for environmental staff and project managers at SDOT, Seattle Public Utilities (SPU) and other Seattle City departments. The purpose of the project was to assist in planning for and obtaining local, state, and federal permits required for typical CIP projects constructed by the City of Seattle. The project included research on local permitting requirements in all jurisdictions where the City of Seattle has operations, and produced both hard copy and electronic guidebooks.

Unico Bell Plaza, Seattle, WA. *Senior Planner.* Mark provided an assessment of options for conversion of designated "public benefit areas" to other uses under current City of Seattle land use code. The public benefit areas were designated when the building was constructed in the 1970s in exchange for additional floor area in this high-rise office building. Some of the public areas have become obsolete or have not functioned well, and the current code allows converting some such spaces to a limited range of uses that provide for better activation of the street level of the building. Mark helped this client to understand the effects of various code and director's rule provisions on this specific property and suggested options that could produce a more vibrant and economically viable use of the building's public spaces.

City of Snohomish SMP Update, WA. *Project Manager.* Mark is assisting the City of Snohomish in the process of updating their current SMP. Mark and ESA staff have produced inventory and analysis of shoreline ecological and physical conditions and draft goals, policies, and environment designations; new use regulations and a restoration plan are being developed.

Island County SMP Update, WA. *Project Manager.* ESA prepared the SMP update for Island County, which is composed of Whidbey Island, Camano Island, and several very small islands in northeastern Puget Sound. Mark supervised all aspects of the project, including public participation; preparation of a shoreline inventory and characterization report; updates to

environment designations, policies, and regulations; developing a restoration plan, and local adoption.

Carmichael Critical Area Permit Assistance, Seattle, WA. *Project Manager.* Mark assisted a homeowner with permitting associated with a Notice of Violation from the City of Seattle. The homeowner was in the process of restoring mostly native vegetation to a hillside that was heavily impacted by invasive non-native trees and shrubs. The violation was for clearing and constructing a trail (with small retaining walls in a wetland and stream buffer and on steep slopes) without permits. In the process of doing the initial work, the homeowner discovered unstable slope conditions that required correction.

Regulatory Compliance and Permit Assistance for University Link Light Rail, Seattle, WA. *Project Manager.* Mark was the permitting lead assisting Sound Transit and the final design team for the University Link light rail project. The project is a 3.15-mile tunnel connecting the Central Link project in downtown Seattle to new stations at Capitol Hill and the University of Washington.

Lacey Gateway Permitting Assistance, WA. *Project Manager*. Mark was the project manager assisting the City of Lacey with permitting for infrastructure improvements associated with development of its planned new town center area, known as Lacey Gateway.

City of Snohomish On-Call Environmental Services, WA. *Project Manager*. Mark is the ESA project manager for this contract to provide assistance to the Planning and Community Development Department. ESA provides wetland and stream review services for current planning review of development proposals.

Malarkey Asphalt Expert Witness Services, King County, WA. *Project Manager.* Mark advised and provide testimony on land use policy issues related to industrial zoning on a project that was part of an EPS Superfund Cleanup on the Duwamish River, just outside of the Seattle City limits. Mark's deposition helped the Port of Seattle and Seattle City Light settle a lawsuit prior to litigation regarding costs related to site cleanup.

Friendly Village Rezone EIS Analysis, Olympia, WA. *Project Manager.* Mark assisted the owner of the Friendly Village Park Mobile Home Park as an exprt witness. Mark provided a critique of a Supplemental Environmental Impact Statement (SEIS) for a comprehensive plan and zoning designation change that would downzone the property from high density residential zoning to Manufactured Home Park zoning. The analysis found that the downzone would reduce the overall residential capacity sufficiently that the City would likely find it necessary to annex additional lands to accommodate anticipated growth.

City of Kenmore SMP Update, WA. *Project Manager.* Mark managed the SMP update for the City of Kenmore in compliance with new Washington State guidelines. The SMP has been adopted by the City and is awaiting final Ecology approval, having recently withstood an appeal.

Northgate Corridor Rezone EIS, Seattle, WA. *Project Manager.* Mark managed development of an EIS examining several possible rezone

scenarios for the Northgate area in Seattle, Washington. The purpose of the proposed rezones is to produce more affordable housing, encourage development that will take advantage of Northgate's high level of transit service, and achieve some of the neighborhood's urban design goals.

Mukilteo Multimodal Ferry Terminal EIS, WA. Senior Planner. Mark began work on this EIS after environmental review had been underway for several years and a new alternative had been introduced. Mark assumed responsibility for the land and shoreline use, sound and vibration, and transportation sections of the EIS. He completed the discipline reports, then summarized the new findings in a reader-friendly Draft EIS, which is currently under review and is expected to be published in early 2007. Major issues include implementation of the City's waterfront plans, compliance with height limits in the waterfront area, parking impacts, and noise impacts during construction.

Regulatory Compliance and Permit Assistance for Sounder Commuter Rail from Everett to Seattle, WA. *Project Manager*. Mark was the project manager leading a team of eight firms assisting Sound Transit with federal, state, and local regulatory compliance and permit acquisitions necessary for track improvements needed to complete the Sounder commuter line from Everett to Seattle.

Northeast Auburn Special Area Plan and Planned Action EIS, Auburn, WA. *Project Manager*. Mark led a six-firm team preparing a sub-area plan and EIS for an approximately 90-acre area near the northeastern boundary of Auburn, WA. The primary proponent of the project is the owner of 55 acres in the center of the planning area that is currently a drive-in theater complex. The proposed uses include a mix of commercial and residential uses totaling approximately one million square feet of floor area.

Safeco Field Major League Baseball Park – Land Use and Environmental Regulatory Lead for City of Seattle. Mark coordinated Seattle's SEPA analysis and review for the new baseball park developed by the Washington State Major League Baseball Public Facilities District (PFD), a public agency. He coordinated City departmental responses to the environmental impact statement, and prepared the Maser Use Permit decision.

Immunex Site Development - Port of Seattle - Land Use and Policy Guidance and Regulatory Supervision for the City of Seattle. Mark provided key policy guidance for permitting of a 1.5 million sq. ft. research and development campus on a large Port of Seattle property at the Northeast corner of Seattle's Elliott Bay. After helping to identify environmental and other regulatory issues early in the permit process, he developed new provisions in the Land Use Code that would provide regulatory certainty needed for major phased developments.

EXHIBIT I





EDUCATION

M.S., Geography, Western Washington University (Emphasis in Resource Conservation & Management)

B.A., Biology, Indiana University

B.A., Environmental Studies, Indiana University

17 YEARS OF EXPERIENCE

CERTIFICATION

Certified Geographic Information Professional (GISP) by the GIS Certification Institute (GISCI) License # 61857

Certified Professional Scrum Master by Scrum.org

Mike Leech, GISP

Director, Geospatial Services

Mike has over 17 years of experience managing and supporting large geospatial, database and web application development projects for water resources, natural resources, and conservation-focused applications. He has managed and led teams responsible for technical services including mobile data collection, satellite image processing and dynamic data visualizations. Mike has served as a technical project manager for clients ranging from local jurisdictions to international organizations. He has provided GIS and technical services support to help solve complex environmental problems. He has also developed curricula for intensive hands-on courses for the Northwest Environmental Training Center in areas of GIS software applications, spatial database development, and information management.

Relevant Experience

Ecology Puget Sound Characterization Phase II, Puget Sound, WA. *G/S & Web Application Development Lead.* ESA worked with Ecology, the Partnership, and the Ecology Watershed Technical Assistance Team to assist in completion of Phase II of the Puget Sound Characterization Project. Mike led GIS analysis and integration of the watershed characterization data into a user-friendly website and dynamic mapping application. The project included convening a user group to identify challenges and opportunities to local governments for using data and products and to test the application. The website also includes a collection of interactive story maps showing applications for land use planning and decision-making. The website is available online at:

<u>https://fortress.wa.gov/ecy/coastalatlas/wc/landingpage.html</u>. The intuitive and interactive framework for the website is intended to provide resources and decision support tools for planners, scientists, and the public using Ecology's watershed characterization data.

Blackjack Creek Watershed Assessment. GIS Lead. The Suguamish Tribe is concerned about human induced impacts to the spawning, rearing, and migratory habitat of Chum, Coho, and Chinook salmon in the Blackjack Creek watershed, and wishes to prevent further degradation and restore habitat-forming processes. Through a science-based assessment, ESA is assisting the Tribe in developing strategies and actions for the watershed, including its estuary and nearshore areas of Sinclair Inlet. ESA is synthesizing findings from existing data and studies and identifying major data gaps; developing maps that display the location and condition of ecosystem components and key ecological attributes; identifying and assessing human induced pressures responsible for degraded ecology; developing watershed-level strategies and site-level actions to address pressure sources and stressors; developing a watershed protection and restoration plan; and coordinating with other entities. The efforts will assist the Tribe in developing a complete and clear plan of distinct strategies and actions that can guide, inform, and ultimately meet its objectives for restoring the stream, its estuary, and nearshore habitats in this area of Puget Sound.

Birch Bay Watershed Characterization and Restoration Prioritization, Whatcom County, WA. *GIS Analyst.* Mike worked with project staff to develop and apply a watershed characterization approach that synthesizes the findings of ecosystem process and habitat diversity models with models of potential land use change within the within the Birch Bay watershed of Whatcom County. As part of a multiple-phased project supported by local, state, and federal agencies the intended outcome of this project was to provide the community of Birch Bay with effective tools for planning future development patterns while effectively working to preserve and restore the natural processes and high quality habitats that exist within the watershed. As part of this process, Mike adapted and applied remote sensing protocols for identifying and characterizing wetland and riparian conditions within the watershed. He has helped to support the build-out scenario models for the Birch Bay watershed to track potential development patterns and impacts within the watershed.

Skagit Climate Science Consortium (SC²) Data Visualization and

Communication Tools, WA. *Project Manager.* ESA worked closely with SC² to produce dynamic flood visualization tools to allow users to interact with sea level rise and flood modeling scenarios for the Skagit River system. Using an interactive web mapping tool, users can compare flooding scenarios for the 2040s and 2080s with the current regulatory floodplain mapped by FEMA. To help communicate the impact of major floods on communities, ESA produced a set of photo visual simulations of flooding at recognizable locations in the Skagit Valley. ESA developed case studies and infographics presenting user-friendly understandings of key climate change issues in the Skagit Watershed. The materials are on SC2's website (<u>www.skagitclimatescience.org</u>). The site will be accessible from the RCO website in December 2017.

Jefferson County No Net Loss, WA. Web Application Development lead. ESA is assisting with implementation of the now adopted SMP regulations. The project is focused around an EPA grant funded framework intended to maximize SMP success and achieving "no net loss" of ecological functions. We are completing an updated reach-by-reach inventory and characterization of existing conditions, which includes review of critical areas conditions along marine and freshwater shorelines, as well as assessing initial shoreline development permit decisions since the SMP became effective in early 2014. Assessment of permit decisions is requiring detailed review and understanding of integrated critical areas regulations; for many shoreline development areas ESA is completing site visits to assess how permit actions are affecting conditions on the ground. These efforts, coordinated closely with Planning Department staff, provide us familiarity with critical areas conditions and management decision implications across the Jefferson County landscape.

Puget Sound Baseline Assessment Phase II, Puget Sound, WA. *Project Manager.* Mike worked with the Washington Invasive Species Council (WISC) administered by the State's Recreation and Conservation Office (RCO) to inventory and assess the presence, distribution, and management actions for 19 priority invasive species and species groups in the Puget Sound Basin. Mike organized the collection and synthesis of information from disparate sources for a more regional look at successes and gaps in efforts, information, and authorities. Mike developed a database of information, species maps, and an online mapping tool that will be provided as a resource through the Council's website. This baseline assessment will serve as an initial step towards a statewide, strategic response to the threat of invasive species.

King County Lands Invasive Plants Survey, WA. *GIS Manager/Database Developer.* ESA provided the King County with a comprehensive inventory of invasive plant species on 21,000 acres of King County conservation land. Mike managed the GPS field and database development/management component of this project which involved delineating the conservation lands into seven distinct habitat cover types using traditional air photo interpretation methods with 1-foot spatial resolution aerial photography from 2007. Field data was linked with a GIS Access database; this allowed spatial and tabular queries on invasive species regarding their distribution and frequency within a given area, cover type, and/or elevation gradient. This habitat-based assessment tool will be used to analyze, monitor and manage invasive species at different spatial scales.

Tacoma Open Space Habitat Plan, WA. *GIS Analyst.* ESA scientists performed an inventory of open space lands in the City of Tacoma in support of the preparation of the Tacoma Open Space Habitat Plan. Mike created a field form for the Trimble GPS unit as a robust data management to during the data collection process. He trained and supervised the data collection and management process including conversion to GIS format. Data was logged with GPS units that tied field data to locations. The inventory was used in the development of an Open Space Management Plan.

Clark County SMP Update, WA. *GIS Manager*. Mike is coordinating GIS analysis and mapping to support Clark County's SMP Update. He is also working with the County's Technical Advisory Group, made up of County staff, Department of Ecology staff, tribal representatives, and other stakeholders. Mike developed a web-based application using ArcGIS Server to support the technical document review process for the team that includes over 60 data layers from a variety of sources. He has also prepared a comprehensive map folio to support the inventory and characterization. Mike has also attended and presented information to the shoreline technical advisory group as well as helped with the facilitation of the public working group meetings.

Farming in the Floodplain Project, Pierce County, WA. *GIS Analyst.* ESA has been hired by PCC Farmland Trust to complete technical work for the Farming in the Floodplain Project (FFP), part of the Floodplains for the Future Puyallup Watershed project, which is funded by a Floodplains by Design grant. The purpose of the FFP is to develop information on the needs of the agricultural community in the Clear Creek area, located just east of Tacoma, Washington. In the first phase of the FFP, ESA convened and led a Technical Advisory Group, participated in a landowner engagement process, and prepared an Existing Conditions Report. In the second phase, ESA prepared an inventory of the agricultural drainage system, assessing tide gates on Clear Creek, researching flood risk in the Clear Creek area, evaluated the impacts of upstream development, and prepared an assessment of the farmland impacts from a proposed levee project. Mike has supported GIS and web mapping components of this project.

Mobile Application Development, Washington Invasive Species Council (WISC), *Project Manager.*

Mike managed the delivery of a mobile iOS and Android application as a public crowd sourcing tool to help support the early detection and rapid response of

invasive species in Washington State. The mobile application includes a reporting tool that allows users to collect GPS location information along with a photo from their smart phone to submit records back to a central database for QA/QC review. This system also includes a companion web application that technical experts from State agencies can use to verify or reject/archive records submitted.

Northwest Environmental Training Center, Seattle, WA. *MS Access Database /GIS Instructor.* Mike is also currently facilitating intensive hands-on courses for environmental professionals in areas of GIS software applications, spatial database development and information management. Mike has been responsible for developing training curriculum and lead instruction for MS Access 2003 Database Design and Management courses and on-going development of GIS Applications for Wildlife Biologists courses.

Mapping Plant Communities at the Alliance Level, O'ahu Forest National Wildlife Refuge. Satellite Image Processor. Mike used high-resolution IKONOS satellite imagery to compare pixel and object-based methods for mapping plant communities and canopy-dominant invasive species on US Fish & Wildlife lands. Mike used several advanced remote sensing tools including object-oriented image analysis package eCognition to assess the changes in accuracy between the two approaches. The final product (GIS database) is currently being used as a management tool by resource managers in the O'ahu Forest National Wildlife Refuge.

Technical Skills

GIS packages: ArcGIS 10x (ArcInfo Version), ArcView 3.x Extensions: 3D Analyst, Geostatistical Analyst, Spatial Analyst, Image Analysis, ArcHydro, Publisher, Mapbox, TileMill, CartoDB, ArcGIS Server, ArcGIS Online **Remote Sensing packages:** ERDAS IMAGINE (Hexagon Geospatial), eCognition Suite

GPS: Trimble GeoExplorer 6000 Series, CE Ceries (XT,XH,XM), Geo 3 and ProXR, Yuma, Garmin 12XL; Pathfinder Office, ArcPad 10x

Other Software: CAD (AutoCAD 2015); Python, Microsoft Office Suite; including MS Access, Adobe CS5, Google Earth, Sketch-up Pro, ESRI Collector, Fulcrum, OpenDataKit

EXHIBIT J



EDUCATION

M.M.A., Marine & Environmental Affairs, University of Washington

B.A., English, University of Washington

Certificate of Wetland Science and Management, University of Washington

18 YEARS OF EXPERIENCE

CERTIFICATIONS

Certified Professional Wetland Scientist (PWS) Society of Wetland Scientists: #1605

Master Birder, Seattle Audubon Society

Certified Wetland & Wildlife Specialist, Pierce County

llon Logan, PWS

Senior Ecologist

Ilon is a senior ecologist with a focus on wetland science, wildlife ecology, and environmental compliance. She has 18 years of experience as an environmental consultant in the Pacific Northwest and brings an interdisciplinary approach to complex environmental and natural resource issues during the planning, design, and permitting phases of a project. She is a technical writer and has authored a full range of scientific and regulatory compliance documents including "best available science" reviews for city and county governments and State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) compliance documents. As a registered Professional Wetland Scientist, Ilon is proficient in all aspects of wetland assessment, delineation, and regulation at the local, state, and federal levels. She has successfully assisted clients with obtaining Corps Section 404 permits, Ecology 401 water quality certifications, and development permits from local agencies. She is also well qualified in wildlife studies involving habitat survey and assessment, bird survey, threatened and endangered species, and impact evaluation.

Relevant Experience

Growth Management Act

City of Olympia Critical Areas Ordinance Update, Olympia, WA. *Project Manager.* Ilon is currently assisting the City with an update of their Critical Areas Ordinance (CAO) (Olympia Municipal Code Chapter 18.32) regulations as required under the Growth Management Act for use of "best available science" and special consideration for salmonids. The City last updated it's CAO in 2005 and several new scientific studies regarding wetlands, buffers, and wetland mitigation have been released since that time. Ilon reviewed Olympia's regulations for consistency with the recent science for wetlands, streams, and their buffers and provided recommendations for revising the code.

Jefferson County Critical Areas Ordinance Update, WA. *Project Manager*. Ilon assisted Jefferson County with its periodic update of the County's Critical Areas Ordinance (CAO) (Jefferson County Code Chapter 18.22) as required under the Growth Management Act (GMA). To ground the CAO update process in up-todate information, Ilon first led the development of a comprehensive synthesis of biological and physical data related to critical areas within eastern Jefferson County. ESA developed watershed "fact sheets" accessible to citizens and landowners to help them easily understand the environmental conditions, issues, and opportunities in each of the County's watersheds. Ilon and her team then prepared a best available science bibliography and synthesis report that leveraged all of the existing information and current federal and state guidance, with a focus on wetlands and fish and wildlife habitat conservation areas. Using these documents, the ESA team reviewed the CAO and identified provisions that need adjustment to better protect and manage critical areas in Jefferson County and ensure compliance with the GMA. Ilon supported the County's public communication during the legislative process and presented to the County's Planning Commission.

Island County Critical Areas Ordinance Update, WA. Project Manager. Island County is reviewing its Comprehensive Plan and Critical Areas Ordinance (CAO) in accordance with the requirements of the Growth Management Act (GMA). As an innovator of tailor-made approaches to protecting aquifers, wetlands, water quality and other resources, the County's approach the current CAO Update process includes an ambitious and comprehensive review of the effectiveness of its current plans, programs, policies, and regulations that pertain to the protection and management of critical areas. Ilon is leading a team of biologists, hydrogeologists, and geologists to utilize a watershed-based approach to inform the evaluation and identify connections between land use planning policies and practices and watershed processes and functions. The County expects to focus on wetland protections, agricultural activities exemption changes, groundwater protection, and landslide hazard areas. The project includes a review of best available science, documentation of existing conditions, and a needs assessment and gap analysis report that identifies options for policy and regulatory changes. Ilon and her team will also support the County with revisions to the Comprehensive Plan, critical areas regulations, and the legislative process up to adoption.

City of Federal Way Critical Areas Ordinance Update, Federal Way, WA. *Project Manager.* Ilon led a team in the update of the City's Critical Areas Ordinance (CAO) (Federal Way Revised Code Title 19; Division V) regulations as required under the Growth Management Act for use of "best available science" and special consideration for salmonids. The City was looking to improve its management and protection of streams, particularly those that are used by salmonids. ESA provided an update to the City's stream inventory, reviewed the CAO regulations for consistency with the recent science for wetlands, streams, and their buffers, provided recommendations for revising the code, and assisted with public outreach during the code update process. Ilon will also assisted the City in exploring the feasibility of implementing a mitigation bank or in-lieu fee program.

City of Kent Critical Areas Ordinance Update, Kent, WA. *Project Manager.* The City of Kent contracted ESA to provide technical support to update the City's Critical Areas Ordinance (CAO) (Kent City Code Chapter 11.06) regulations as required under the Growth Management Act for use of "best available science" and special consideration for salmonids. Ilon was the manager and lead scientist for this project which review of the CAO for consistency with best available science, providing recommendations for revising the regulations, and supporting the City's public communication during the legislative process. ESA also supported the City in achieving compliance with the National Marine Fisheries Service Biological Opinion (BiOp) of the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP).

City of Renton Critical Areas Ordinance Update, Renton, WA. *Project Manager.* Ilon is leading an update of the City's Critical Areas Ordinance (CAO) (Renton Municipal Code Chapter 4-3-050) regulations as required under the Growth Management Act for use of "best available science" and special consideration for salmonids. The City last updated it's CAO in 2004 and several new scientific studies regarding wetlands, buffers, and wetland mitigation have been released since that time. Ilon reviewed Renton's CAO regulations for consistency with the recent science for wetlands, streams, and their buffers and provided recommendations for revising the code. She facilitated a half-day workshop to help City staff better understand wetlands in Renton, federal and state regulations, and the various implications of the recommendations. Ilon has provided a set of code revisions and will provide technical support to City staff during the legislative process of the CAO update.

City of Edmonds Critical Areas Ordinance Update, Edmonds, WA. *Senior Scientist.* The City of Edmonds has contracted ESA to provide technical support to update the City's Critical Areas Ordinance (CAO) regulations as required under the Growth Management Act for use of "best available science" and special consideration for salmonids. ESA is reviewing the CAO for consistency with best available science, providing recommendations for revising the regulations, and supporting the City's public communication during the legislative process. Ilon is assisting with code review, BAS assessment, and code update effort for the project.

City of Shoreline, Shoreline Master Program Update, Shoreline, WA. *Project Scientist.* Ilon was the primary biologist for the City of Shoreline's comprehensive update of its Shoreline Master Program. She assisted with the revision of the City's inventory and characterization report ensuring compliance with the 2003 Ecology Guidelines. Ilon characterized the physical and biological nearshore environments and assessed existing shoreline ecological functions. An analysis of existing and proposed land uses, shoreline functions, and opportunity areas for restoration was also developed. Ilon coordinated with Ecology and City staff to address Ecology comments.

Island County Best Available Science Review for Fish and Wildlife Habitat Conservation Areas, Island County, WA. Senior Scientist. Island County contracted ESA to provide scientific expertise in support of updates to the County's Critical Areas Ordinance (CAO) (Island County Code Chapter 17.02) as required under the Growth Management Act (GMA). Ilon prepared a comprehensive technical paper that summarized the "best available science" for protecting and managing development in the marine nearshore. Because Island County is located adjacent to some of the most productive salmon-producing rivers in western Washington – the Snohomish, Stillaguamish, and Skagit – the County's major contribution to salmon productivity is its nearshore habitat. Ilon researched and presented the state of the science specific to existing resources in Island County and analyzed the protections provided by County regulations and policies. The review focused on key issues for Island County, which include water quality degradation from septic systems, shoreline alteration, and a loss of connectivity between nearshore and upland habitats and freshwater streams.

City of Gig Harbor Wetland Inventory and Best Available Science Review, Gig Harbor, WA. *Project Scientist*. ESA assisted the City of Gig Harbor with review of the City's Critical Areas Ordinance (CAO) (Gig Harbor Municipal Code Chapter 18.08) as required under the Growth Management Act (GMA) for use of "best available science" and special consideration for salmonids. Ilon authored a technical memorandum that summarized the state of science for wetlands, streams and buffer requirements. The project included review and revision to the city code language for consistency with best available science. ESA was subsequently contracted to conduct a wetland survey of existing wetlands within the Urban Growth Area. Ilon assisted with a detailed paper inventory using existing resources and verified potential wetland areas through a reconnaissance-level field survey.

City of Woodinville Sensitive Area Ordinance Update, Woodinville, WA. *Project Scientist*. Ilon assisted the City of Woodinville with review of the City's Sensitive Areas Ordinance (SAO) as required under the Growth Management Act (GMA) for use of "best available science" and special consideration for salmonids. Ilon prepared technical reports that summarized the state of the science for wildlife, wetlands, streams and buffer requirements. The reports addressed the spatial geography and quality of sensitive areas in the City and strategies for their protection in Woodinville. The project also included review and revision to the SAO code language for consistency with best available science.

NEPA / SEPA

Washington Department of Fish and Wildlife Hydraulic Code Rules Update Programmatic EIS, WA. Senior Scientist. ESA prepared a programmatic SEPA EIS for the Washington Department of Fish and Wildlife evaluating proposed changes to the Hydraulic Code Rules. The Hydraulic Code Rules, which apply to in-water work throughout Washington State, haven't been updated since 1994. WDFW developed a revised set of rules with extensive stakeholder input. ESA developed an innovative structure to analyze impacts from a wide range of changes to how inwater projects will be permitted. Ilon was part of a team that identified the impacts to fish species and habitats that occur from in-water work, then described how changes to the code rules for each regulated activity would affect the impacts of the activity. Both adverse impacts and benefits from the proposed rule changes were identified in the EIS.

Bureau of Reclamation and Washington Department of Ecology Cle Elum Reservoir Pool Raise NEPA/SEPA EIS, Washington State. Senior Ecologist. ESA assisted the Bureau of Reclamation and Washington Department of Ecology in preparation of a NEPA/SEPA EIS for the proposed 3-foot pool raise at Cle Elum Reservoir. The proposed project is part of the Yakima River Basin Integrated Water Resource Management Plan. Ilon prepared affected environment and impact sections for wildlife and wildlife habitat.

Bureau of Reclamation and Washington Department of Ecology Kachess and Keechelus Reservoir NEPA/SEPA EIS, Washington State. Senior Ecologist. ESA assisted the Bureau of Reclamation and Washington Department of Ecology in preparation of a NEPA/SEPA EIS for two proposed projects that are part of the Yakima River Basin Integrated Water Resource Management Plan. The Kachess Reservoir Drought Relief Pumping Plant project would construct a pumping plant to access an additional 200,000 acre-feet of water from the reservoir during drought years. They Keechelus Reservoir-to-Kachess Reservoir Conveyance consists of a tunnel that would transfer water directly from Keechelus Reservoir to Kachess Reservoir in order to reduce artificially high flows in the Yakima River downstream from Keechelus Dam to improve anadromous fish habitat. Ilon prepared affected environment and impact sections for wildlife and wildlife habitat and analyzed each project for impacts to terrestrial and aquatic wildlife. Seattle Public Utilities Combined Sewer Overflow Program, Programmatic EIS, Seattle, WA. Senior Scientist. ESA managed the programmatic EIS for SPU's Combined Sewer Overflow Long Term Control Plan, referred to as Protecting Seattle's Waterways. ESA worked closely with the City to develop the outreach strategy, organized and attended scoping meetings, and developed the overall EIS outreach approach. The Long Term Control Plan features a highly complex range of alternatives to control CSO outfalls in ten different neighborhoods throughout the City. Each alternative consists of a different package of storage pipes, tanks, tunnels, and flow transfers to handle overflows. Some alternatives include collaboration with King County on larger projects. ESA developed a streamlined structure to highlight the impacts of the various combinations of projects both at the neighborhood scale and as they impact the City as a whole. The EIS also includes a robust discussion of cumulative impacts from past, present, and future construction in the City. Ilon was the lead author for the biological resources portion of the EIS.

Yakima River Basin Integrated Water Resource Management Alternative Programmatic EIS, WA. Senior Scientist. Ilon provided biological resource expertise and authored sections of a programmatic EIS that evaluated an integrated water resource management alternative to address water shortage issues in the Yakima River basin. The integrated alternative was developed in response to comments on the Yakima River Basin Water Storage Feasibility Study that storage alone would not solve the water problems in the basin. Ilon evaluated potential short-term and long-term impacts from each of the elements of the integrated plan on vegetation, wildlife, and listed species.

Fairhaven Highlands Planned Development EIS, Bellingham, WA. *Senior Scientist.* Ilon provided biological support for the development of a SEPA EIS on behalf of the City of Bellingham, Washington, for development of approximately 739 single and multi-family dwelling units on approximately 85 acres of land. The project would impact transportation, wetland, wildlife habitat, land use and other aspects of the environment. The City has asked ESA to develop the EIS using technical studies developed by the project proponent. ESA is responsible for determining whether the submitted studies adequately address the impacts, facilitating public scoping and comments meetings, and preparing the Draft and Final EIS. Ilon reviewed biological studies provided by the applicant and was the primary author of the plants and animals portion of the EIS.

Sammamish Town Center Sub-area Plan and EIS, Sammamish, WA. Senior Scientist. Ilon provided biological expertise for the analysis of wetlands, streams, wildlife and wildlife habitat in the proposed Town Center in the City of Sammamish. The Town Center Plan is an integrated SEPA/GMA sub-area plan for the Sammamish Town Center and ESA led the EIS process. Work included assistance with the development of Town Center alternatives, providing public involvement and facilitation assistance, and implementing smart growth and sustainable development principles. Ilon conducted field investigations and ¬researched background information to target areas in the subarea for conservation.

Chambers Creek Regional WWTP Facility Plan & Upgrade EIS, Pierce County, WA. *Senior Scientist.* ESA prepared an EIS/SERP document for the Wastewater Facilities Plan at the Chambers Creek Wastewater Treatment Plant in Pierce County, Washington. The existing treatment plant is located adjacent to the recently developed Chambers Bay Golf Course, a world-class 18-hole golf course on the bluff above Chambers Bay. The expansion of the treatment plant is needed to accommodate planned population growth in Pierce County. The expanded facility will be incorporated into development plans for the Chambers Bay Properties, including facilities associated with the Golf Course. Ilon evaluated impacts to shellfish, wetlands, and wildlife.

Lake Roosevelt Incremental Storage Releases Supplemental EIS, WA. Senior Scientist. Ilon was the primary biologist for the development of a Supplemental EIS for the proposed drawdown of Lake Roosevelt. The drawdown is a component of the Columbia River Basin Water Management Program and will release additional water from Grand Coulee Dam to improve municipal and industrial water supply, provide water to replace some ground water use in the Odessa Subarea, enhance stream flows in the Columbia River to benefit fish, and provide water to interruptible water right holders in drought years. Ilon researched existing information and impacts associated with drawdown in existing reservoirs to prepare the EIS. She also coordinated with the Washington Department of Fish and Wildlife during project scoping and document development.

Columbia River Basin Programmatic EIS, WA. *Project Scientist.* Ilon was the principal biologist for terrestrial wildlife and plants for a legislative-mandated EIS developed by Ecology. In 2006, the Washington State legislature passed the Columbia River Management Act, which directed Ecology to aggressively pursue development of water supplies to benefit both instream and out-of-stream uses. ESA was contracted to assist Ecology with preparation of a programmatic EIS. The EIS included water conservation measures, instream flow analyses, and new storage options.

Yakima River Basin Water Storage Feasibility Study SEPA Supplemental EIS, WA. Project Scientist. Ilon was the primary biologist for the Department of Ecology's team that evaluated alternatives proposed by the state to improve water allocation in the Yakima River basin. A combined NEPA/SEPA Draft Planning Report/EIS was issued in January 2008. The Bureau of Reclamation evaluated two off-stream reservoirs and Ecology evaluated water conservation, water marketing, and ground water storage alternatives. The SEPA Supplemental Draft EIS evaluated additional water supply and habitat improvement projects in the Yakima River basin.

Keystone Ferry Terminal Project, Island County, WA. *Project Scientist.* Washington State Ferries is proposing to replace the existing Keystone Ferry Terminal and to expand the vehicle holding capacity. Ilon conducted field investigations for wildlife and wildlife habitat in the vicinity of Keystone and analyzed project impacts under several proposed alternatives. Ilon prepared the terrestrial plants and animals discipline report, and the NEPA EA sections for these disciplines.

Mukilteo Multi-Modal Ferry Terminal Project, Mukilteo, WA. *Project Scientist.* Washington State Ferries is proposing to relocate the existing Mukilteo Ferry Terminal to a new site - the former Tank Farm property - located just east of its present location on the Mukilteo waterfront. The new terminal will be expanded to two ferry slips and will accommodate pedestrian connections to bus transit and commuter rail as a multimodal facility. Ilon provided biological resource assistance for the project and prepared portions of the Biological Assessment.

Plymouth Generating Facility EIS, Plymouth, WA. *Project Scientist.* Ilon conducted wildlife and wetland surveys for proposed combined-cycle power plant and associated access roads and transmission lines. She also prepared biological resources technical EIS sections and analyzed several alternative route alignments in order to identify impacts from the project to wetlands, priority habitats, and federal and state listed species. Primary species included bald eagle, ferruginous and Swainson's hawks, and Washington ground squirrel. Ilon recommended measures to mitigate impacts to wetlands and shrub-steppe habitat. Not ESA Job

Kosciusko Island, Tuxekan Island, and Otter Lake Timber Sale EISs, Tongass National Forest, Alaska. *Project Scientist.* Ilon served as the primary wildlife biologist for multiple timber sale Environmental Impacts Statements over three years for the US Forest Service. Projects were located in southeast Alaska in the Tongass National Forest. Ilon authored Wildlife Resource Reports and Biological Assessment/ Evaluations for each of the three projects, assisted with overall development of EIS documents, and served as issue processing team member in all projects. She also contributed significantly to several other EIS technical reports, including; Biodiversity and Old Growth, Threatened and Endangered Species, Wetlands, Land Use, Recreation, Heritage Resources. Not ESA Job

North Bend Gravel Mining Operation EIS, North Bend, WA. *Project Scientist.* Ilon conducted wildlife surveys, including threatened and endangered species, and habitat mapping and assessment for a proposed gravel mine in North Bend, Washington. She also identified and delineated wetlands, and prepared a technical wetland report to support environmental permitting requirements. During EIS development, she prepared plants, animals, and wetlands sections and developed responses to public comments on Draft EIS. This project included a multiphase restoration plan of mined areas. Not ESA Job

Ecosystem Assessment, Restoration, and Recovery

Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) Stakeholder Involvement and Outreach Plan for Potential Restoration Projects, WA. *Project Manager.* ESA worked with WDFW to update a stakeholder involvement and outreach plan for the three PSNERP projects that recently received Federal Water Resources Development Act (WRDA) authorization: Duckabush River Estuary, Nooksack River Delta, and North Fork Skagit River Delta. The original plan was prepared by ESA in 2011 and the current plan will increase the level of detail and depth of information for three projects. ESA interviewed stakeholders, produced informational outreach materials, and developed visual simulations of the three project sites to depict the proposed restoration using the existing conceptual designs.

Skagit Watershed Council Riparian Habitat Assessment & Strategy Development, WA. Senior Ecologist. ESA is assisting the Skagit Watershed Council (SWC) with a GIS-based assessment of current riparian conditions that employs remote sensing methods, field investigation, and web-based crowd sourcing of information. Ilon is leading the development of riparian condition metrics and a conceptual framework for categorizing riparian conditions. She is working with geospatial analysts to use the results of the riparian assessment to determine management strategies for developing and implementing voluntary riparian actions in priority floodplain and tributary habitats in the upper, middle, and lower Skagit watershed.

Blackjack Creek Watershed Assessment, Kitsap County, WA. Project Manager. The Suguamish Tribe identified Blackjack Creek as a priority watershed for salmon and has contracted ESA to develop a watershed plan that will protect and restore watershed, riparian, floodplain and stream processes and habitat functions for salmonids. Ilon is leading a team of biologists, hydrogeologists, and geospatial analysts to utilize a watershed-based approach to inform the evaluation and identify the most significant factors that adversely impact salmonid habitat and populations within the Blackjack Creek watershed as well as those that maintain ecosystem functions and improve habitat and the stream's resilience to external changes (e.g., increased peak flows associated with urbanization and climate change). The assessment follows the Open Standards Framework for the Practice of Conservation to characterize pressures and stressors at the watershed, subwatershed, reach, and site scales and then use this information to recommend and prioritize strategies and actions such as land acquisition, conservation easement, long-term monitoring, and adaptive management. In addition, the effort includes prioritization of potential actions including identification of critical stream segments and riparian corridors, specific sites needing restoration, key physical elements of channel restoration, recommended methods for channel and floodplain restoration, and restorative flood protection.

Puyallup River Floodplains by Design Programmatic Monitoring Plan, WA.

Project Manager. ESA is assisting the Pierce Conservation District in developing a monitoring plan for health of the Puyallup River floodplain as it relates to supporting salmon populations, conserving agricultural lands, and reducing the risk of flooding in the Puyallup River watershed. The monitoring plan is part of a larger 10-year vision for floodplain restoration funded by Floodplains by Design grant program. This highly collaborative effort aspires to establish a floodplain health baseline and track landscape-level impacts to determine if floodplain health at a watershed-scale is improving or degrading as projects are implemented over time. Ilon is leading a team that is working with stakeholder groups to identify existing monitoring efforts in the watershed, define floodplain health, identify and select indicators, develop a floodplain health index, craft the 10-year monitoring plan, and create communication strategies and tools to report monitoring plan results to legislators at the local, state and federal level as well as the broader community.

Alliance for Healthy South Sound Strategy Development, WA. Deputy Project Manager. The Alliance for a Healthy South Sound is a regional coordinating group that works to prioritize, seek funding for, and carry out the most important actions to restore the health of South Puget Sound. ESA provided research and geospatial analysis to support the Alliance with the development a 5-year recovery strategy and a 2-year recovery action work plan. Ilon's work included analyzing a draft list of potential ecosystem attributes related to nine ecosystem focus areas and providing recommendations for selection and mapping; developing status and trends information for each ecosystem focus area at the inlet scale; developing logic models that clearly express the Alliance's approach to recovery in each focus area; and providing technical support at workshops with Alliance members and partners.

Puget Sound Partnership Multi-Scale Soundwide Pressure Assessment, WA. Deputy Project Manager. ESA was part of the contractor team working with the Puget Sound Partnership on the Puget Sound Pressures Assessment (PSPA). The PSPA was a systematic, expert-based evaluation of the potential impact of stressors on ecosystem endpoints within the Puget Sound Basin. The assessment is intended to inform and guide science and management priorities with an updated and prioritized list of pressures on the Puget Sound ecosystem. The PSPA used an expert elicitation process to systematically collect expert scientific judgment about the vulnerability of specific endpoints (such as Chinook salmon, forage fish, depressional wetlands) to stressors (such as land cover alterations, non-point source pollution, animal harvest) across the terrestrial, freshwater, nearshore, and marine domains. The PSPA examined the distribution and frequency of stressors and endpoints within watersheds and marine basins through targeted GIS analysis at a scale that is relevant for ecosystem management. Ilon helped refine the lists and definitions of stressors and endpoints; helped map and quantify their distribution; facilitated the expert elicitation process; and worked with the Puget Sound Science Panel and other experts to analyze and interpret the results of the assessment.

Marine Nearshore Habitat Connectivity Project, Bellingham, WA. Senior Ecologist. ESA assisted the City of Bellingham in assessing the habitat connectivity along the nearshore in conjunction with a Master Plan for the downtown waterfront. In planning potential nearshore restoration as part of the waterfront Master Plan, the City asked ESA to assess the habitat connectivity --this was done for two connectivity axis, 1) along the intertidal shoreline and 2) between the marine riparian zone and the marine shoreline. ESA researched habitat connectivity issues in the nearshore environment and then developed a simple model that evaluated connectivity in each of 28 sub-units of the City's shoreline. Ilon was part of a team that developed the model, chose evaluation elements (juvenile salmon, sediment input/transport, organic material transport, etc.), applied the model, and interpreted the results. A report was prepared that provided background on habitat connectivity, described the methods used for developing the model, and presented the results. Ilon presented the model results at the annual meeting of the Society of Northwest Vertebrate Biologists Conference.

Puget Sound Partnership Integrated Nearshore Priorities, WA. Project Manager. ESA supported the Partnership in tackling a foundational near-term action in the 2012-2013 Action Agenda for marine and nearshore ecosystem recovery: the Integrated Nearshore Priorities project. The project was a combination of research, GIS analyses, and mapping inspired and vetted by an interagency technical workgroup comprised of scientists from NOAA Restoration Center, US Fish and Wildlife, and the state Departments of Ecology and Fish and Wildlife. Ilon managed a collaborative process to identify integration opportunities and challenges of bringing together existing data and assessment results from Ecology's Watershed Characterization program and the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) Strategies Report. As a proof of concept for integrating available information about nearshore ecosystems, the project team selected Pacific sand lance and surf smelt spawning beaches as the valued resource. Ilon facilitated multiple interagency workgroup meetings, helped develop the "Nearshore Platform", a web-based mapping application with forage fish spawning and sediment supply information, and produced a summary report.

Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) Nearshore Restoration Conceptual Design Projects, WA. *Senior Scientist.* ESA supported the PSNERP project by preparing conceptual restoration designs for more than 40 Puget Sound nearshore restoration activities, cost estimates, and local feasibility analyses. PSNERP is a large-scale initiative that is being developed by a joint entity composed of the USACE and Washington Department of Fish and Wildlife (WDFW) and other government organizations, tribes, industries, and environmental organizations focused on restoring nearshore ecosystems in Puget Sound. Ilon worked with restoration designers, USACE engineers, and PSNERP to review and refine conceptual restoration designs and understand USACE requirements for project authorization. Ilon also developed a set of fact sheets that described the context, proposed restoration, and anticipated benefits for each of the restoration actions. She also contributed to a strategic stakeholder plan written to guide PSNERP's current and future outreach activities.

Puget Sound Partnership's Biennial Science Work Plan and 2020 Action Agenda Update, WA. *Project Manager.* The Puget Sound Partnership updated two important documents that describe high priority long-term strategies, near-term actions and scientific research needs for Puget Sound recovery. Ilon worked with the Partnership's Science Director and the Science Panel to develop a work plan that provides a strategic focus on science needs. Ilon provided an analysis of past documents developed for the Partnership's strategic science program in order to develop and tailor the science work plan outline. She led an effort to inventory all current and ongoing science programs in Puget Sound and recommendations for what is still needed. Ilon also polled local scientists, conservation practitioners, and other stakeholders about science priorities and provided summary information to the Science Panel. She authored portions of the draft science work plan and refined the document in response to public comments. Ilon was also asked to provide review and input on marine and nearshore strategies of the Action Agenda Update.

Clackamas County Integrated Stormwater Adaptive Management Plan, OR. *Senior Scientist.* Clackamas County asked ESA to develop an Adaptive Management Plan for Cedar and Rock Creek watersheds that identifies stormwater management strategies for improving watershed health. The purpose of the plan is to guide surface water management activities to improve overall stream and watershed health and measure incremental improvements in stream health as these actions are implemented. These activities aim to integrate hydromodification management and water quality treatment into a watershed based program that addresses hydrology, water quality, habitat, and biological components through retrofits and other capital projects, as well as watershed and land use planning. Ilon conducted a best available science review for wetlands and their buffers as they relate to watershed health.

Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), WA. *Research Assistant.* While in graduate school at the University of Washington's School of Marine & Environmental Affairs, Ilon was funded by PSNERP to conduct

her thesis research on climate change adaptation strategies for nearshore protection and restoration policies. Her thesis, Informing Coastal Restoration Planning Decisions in a Changing Climate, provides a set of principles for considering climate change effects during restoration planning and implementation and a decision support framework for adapting restoration policies to be more robust to climate change. Ilon also supported PSNERP's Nearshore Science Team through documentation of monthly meetings and the development and execution of a one-day workshop on climate change. Ilon conducted surveys of the restoration practitioner community prior to the workshop and completed a workshop summary white paper.

Puget Sound Science Update, WA. *Research Assistant*. While in graduate school, Ilon was also funded by the Puget Sound Partnership to assist in preparing the latest Puget Sound Science Update, a state-of-the-science document for supporting the work of the Partnership. She was part of a University-led team of scientists documenting the biophysical environment of the Puget Sound. Ilon was the primary author of multiple status and trend summaries for biological indicators of Puget Sound health, including eelgrass, kelp, marine birds, bald eagles, and harmful algal blooms. Ilon also assisted in the evaluation of ecological indicators for measuring the success of Puget Sound recovery efforts.

Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) Management Measures Technical Report, WA. Senior Scientist. Ilon was second author of a comprehensive report on the science and application of nearshore restoration actions. The technical report helps determine how to effectively use management measures to accomplish process-based restoration in the Puget Sound; describes the relationship of these management measures to Puget Sound nearshore processes, structure, and functions; and provides project engineering planning and design guidance to ensure consideration of relevant constraints and best practices. Ilon worked with PSNERP's Implementation Team to develop a technical report that would be used by PSNERP as well as other restoration practitioners to craft potential restoration solutions to address documented nearshore ecosystem degradation in the Puget Sound. The technical report includes an overview of the uses of management measures in large-scale restoration efforts and an analysis of each measure's vulnerability to sea level rise.

Puget Sound Partnership 2020 Action Agenda, WA. *Senior Scientist.* ESA assisted with managing and developing the 2020 Action Agenda which identified the key threats facing Puget Sound and the actions that must be taken to more toward a healthy Sound by 2020. Ilon supported the provisional indicators working group - a consortium of experts examining available indicators that reliably measure the health of various ecosystem components of Puget Sound. She also supplied technical expertise in developing the Biennial Science Work Plan and the inventory of existing programs in the Puget Sound. Her work analyzed studies and recommended studies in relation to species/biodiversity, nearshore and marine habitats, marine and freshwater quality and quantity, including toxics, pathogens and nutrients.

Climate Change Vulnerability Assessment

Skaqit Climate Science Consortium (SC²) Data Visualization and

Communication Tools, WA. Senior Ecologist. Working with MacIlroy Consulting, Inc., ESA developed data visualization and communication tools for the Skagit Climate Science Consortium to communicate projected changes in flood conditions. ESA worked closely with SC² scientists to produce dynamic flood visualization tools to allow users to interact with sea level rise and flood modeling scenarios for the Skagit river system. Using interactive web mapping tool, users can compare flooding scenarios for the 2040s and 2080s with the current

regulatory floodplain mapped by FEMA

(http://www.skagitclimatescience.org/flood-scenario-map/). ESA also used the projected future flood levels to create a 3D Google Earth flyover, which was incorporated into a narrated video about climate change and flood risks in the Skagit Valley. In order to help communicate the impact of major floods on communities, ESA produced a set of photo visual simulations of flooding at recognizable locations in the Skagit Valley. ESA also developed a range of case studies and infographics presenting user-friendly understandings of key climate change issues in the Skagit Watershed, including an infographic and case study on the combining forces of sea level rise and changing precipitation on flood risk and the role of dams in flood risk reduction. Materials are accessible on SC²'s website (www.skagitclimatescience.org) and were displayed at the Museum of Northwest Art during the Surge Festival, a community-based climate change art festival.

City of Tacoma, Climate Change Resilience Study, Tacoma, WA

ESA is part of a team conducting a climate change resilience study for the City of Tacoma, covering risks to infrastructure assets, natural systems, and social systems. As part of this process, the team is facilitating two stakeholder workshops to raise awareness of anticipated climate impacts and conduct a participatory evaluation of potential adaptation measures. The final document will highlight key local climate impacts and vulnerabilities, and provide a shortlist of adaptation strategies and further study needs that take into consideration City priorities, resource constraints, and unique windows of opportunity for adaptation action. Ilon is providing biological expertise to the natural systems component of the assessment.

Coastal Resilience QAPP Development, WA. *Project Manager.* Ilon supported the Nature Conservancy's project "Vulnerability and Resilience of Estuaries and Community Infrastructure to Climate Change" by preparing a Quality Assurance Project Plan (QAPP). This project is funded by an EPA Puget Sound Science and Technology Grant and requires a QAPP as part of grantee responsibilities. Ilon consolidated project information on new data sources and methods, numerical modeling, and proposed decision support tools to meet EPA requirements.

Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), WA.

Research Assistant. While in graduate school at the University of Washington's School of Marine & Environmental Affairs, Ilon was funded by PSNERP to conduct her thesis research on climate change adaptation strategies for nearshore protection and restoration policies. Her thesis, Informing Coastal Restoration Planning Decisions in a Changing Climate, provides a set of principles for considering climate change effects during restoration planning and implementation and a decision support framework for adapting restoration policies to be more robust to climate change. Ilon also supported PSNERP's Nearshore Science Team through documentation of monthly meetings and the development and execution of a one-day workshop on climate change. Ilon conducted surveys of the restoration practitioner community prior to the workshop and completed a workshop summary white paper.

Park Development

Cheasty Trail Environmental Review, Seattle, WA. *Senior Ecologist.* The City of Seattle Parks and Recreation Department (Seattle Parks) plans to build a recreational trail system in the Cheasty Greenspace located on Beacon Hill in

Seattle, Washington. The proposed trail system consists of soft-surface bike and pedestrian trails to provide both passive and active recreation opportunities for the local community. The greenspace is currently undeveloped and contains several wetlands amongst undisturbed deciduous forest. Seattle Parks plans to cross wetlands and other drainage features with bridges or boardwalks to minimize environmental impacts. ESA was contracted by Seattle Parks to conduct a preliminary environmental review of the greenspace and performed a wetland reconnaissance and wildlife habitat assessment. Ilon identified multiple wetlands and wildlife habitats and summarized this information in a technical memo to provide a baseline of existing conditions, inform the project design process, and determine potential regulatory requirements. Ilon also worked with the project team to avoid and minimize impacts to critical areas and advise them on local permit requirements and process.

Totem Lake Park Phase I Permitting Support, Kirkland, WA. *Project Manager.* The City of Kirkland is proposing improvements to Totem Lake Park under the City's Master Plan. The multi-phased park development will include public amenities such as parking and restrooms; safety improvements such as sidewalks and trails to accommodate both pedestrians and bicycles; and wildlife viewing through passive open spaces, elevated piers, and seating. Phase 1 of the Master Plan involves the construction of an approximately 870 linear-foot boardwalk on the eastern portion of the property. The boardwalk would provide a connection between the Cross Kirkland Corridor Trail and the existing foot path on the north side of the park. Ilon managed and performed wetland delineations and functional assessments of the project site, SEPA documentation, and cultural resource assessment for the City. Her team proposed mitigation approaches and collaborated with architects on the evaluation of design alternatives that would result in minimal impacts to critical areas and simplify the permit process.

Forbes Lake Trail Master Plan, Kirkland, WA. *Project Manager.* Ilon was the project manager and lead biologist of this pedestrian trail and park improvement project for the City of Kirkland. The City wanted to connect existing non-motorized routes via a trail and elevated boardwalk system around a portion of Forbes Lake, a seven-acre freshwater lake. The lake shoreline and vicinity support a large, high value wetland complex and Ilon worked with landscape architects and the City to determine potential impacts and regulatory implications of several trail alternatives. She led the fieldwork effort that included wetland delineation and flagging Forbes Creek along the public's preferred alignment. Ilon developed a conceptual mitigation plan for the project, which proposed multiple enhancement techniques on areas of degraded wetland and upland.

City of Covington 180th/240th Street Park, Covington, WA. *Project Manager.* Ilon assisted the City of Covington with plans for a multi-use city park that will include both passive and active recreation opportunities for the local community. The future park site is located on a salmon stream (Little Soos Creek) and contains several wetlands. Ilon conducted wetland delineations and a wildlife habitat assessment to assist park planners and the City in site design. She developed a critical areas report and initiated local, state, and federal permitting efforts, which includes Clean Water Act Section 404 and Section 401, Section 7 ESA Consultation, and SEPA review before funding for the project was delayed. Log Boom Park Phase 2 Waterfront Improvements, Kenmore, WA. *Project Biologist.* Ilon assisted with biological and permit-related services for proposed or planned improvements at Logboom Park in the City of Kenmore, Washington. The City proposes to redevelop the park, located on the Lake Washington shoreline, and expand recreational opportunities. Ilon participated in the preliminary design and alternatives analysis for four potential stream restoration alignments in the park, a siting study for planned off-site wetland mitigation, and preparation of a permit plan for other proposed waterfront improvements at the Park.

Tambark Creek Community Park, Snohomish County, WA. *Project Biologist.* Snohomish County Parks Department underwent and extensive redevelopment of Tambark Creek Community Park as a multi-use park that includes trails, playgrounds, picnic shelters, sports fields and courts, and an activity center. Ilon was the lead biologist for the characterization of streams and wetlands within the proposed park, covering approximately 40 acres. She worked extensively with design engineers to avoid and minimize impacts to sensitive areas and identify areas for potential restoration. Ilon met WDFW biologists in the field to discuss wildlife habitat restoration and developed a mitigation plan to include stream restoration and wetland creation along a section of Tambark Creek. She prepared federal and state permit applications for the Corps, Ecology and WDFW and successfully received all necessary permits.

Celebration Park Community Center, Federal Way, WA. *Project Biologist.* Ilon was the key biologist focusing on wetland impact analysis and authoring the mitigation plan for construction of a Federal Way Community Center in Celebration Park. The Community Center is an 80,000 square foot building built on a forested 10-acre site that includes wetlands. Ilon worked with Federal Way Parks staff to set aside and preserve in perpetuity forested portions of the park as mitigation for wetland buffer impacts.

Silver Lake Trail Master Plan, Everett, WA. *Project Biologist.* The City of Everett is currently developing a trail master plan to develop a paved and boardwalk trail around Silver Lake. Ilon provided an assessment of environmental conditions and constraints associated with trail development. She also advised the project team on federal and state permitting strategies for wetland impacts as well as identified potential areas for lake-fringe wetland restoration.

Split Rock Recreation Site, Okanogan County, WA. *Project Manager.* ESA was contracted by the Bureau of Land Management (BLM) to conduct wetland investigations at the Split Rock Recreation Area in north-central Washington. The BLM proposal includes expansion of the recreation area to accommodate additional boat and vehicle traffic. Ilon performed wetland delineation and developed a letter summarizing wetland characteristics, impacts, and proposed mitigation. The project is located at the south end of Palmer Lake, within the Sinlahekin Valley.

Transportation & Utilities

Eastgate Interceptor Rehabilitation Project Phase III, Bellevue, WA. Senior Ecologist. ESA is providing environmental services to King County Wastewater Treatment Division (WTD) and their proposal to rehabilitate an existing sewer line in eastern Bellevue with a project that will involve open-cut trenching through a wetland complex associated with Kelsey Creek. Ilon led a team of biologists and landscape architects to identify potential impacts to critical areas, work with project engineers to avoid and minimize impacts, and design a mitigation plan. The team supported King County with their application for a Section 404 Nationwide Permit from the US Army Corps of Engineers and a Hydraulic Project Approval from Washington Department of Fish and Wildlife.

Tumwater Reclaimed Water Main, Thurston County, WA. *Senior Biologist.* ESA assisted LOTT with the preparation of the environmental documentation and permitting for the Deschutes Parkway to Tumwater Reclaimed Water Pipeline. LOTT proposed the construction of a reclaimed water pipeline from its Budd Inlet Reclaimed Water Plant in the City of Olympia to the Tumwater Valley Municipal Golf Course, in order to supplement irrigation needs at the golf course. Ilon conducted field work to identify potential impacts to critical areas and then worked with project engineers to modify pipeline alignments to avoid impacts. Ilon assisted in preparing a SEPA checklist and accompanying State Environmental Review Process (SERP) documentation in support of LOTT's funding application process. This was done in a short timeframe in order to meet application deadlines, and the project received funding.

Redmond Wastewater Pump Station No.3, Redmond, WA. *Senior Biologist.* The City of Redmond Public Works Department is rehabilitating the Redmond Pump Station No. 3 located near the southern boundary of Idylwood Park on the shore of Lake Sammamish. The project involves construction of a new pump station and appurtenances, and includes realignment and improvements to a non-fish bearing stream tributary to Lake Sammamish. Ilon is supporting the environmental documentation and permitting of the project including the SEPA environmental checklist, Critical Areas Report, and Biological Assessment. Ilon documented an active bald eagle nest on the site and provided the City with the permitting implications of the nest. Because the project is located on the shore of Lake Sammamish and involves the relocation of an intermittent stream channel, federal, state, and local permits are required. Construction of the project is currently scheduled to begin in 2017.

Brightwater Regional Reclaimed Water Phase III, King County, WA. *Project Biologist*. Ilon was the primary author of the multiple wetland, stream, and wildlife assessments and buffer restoration plans required for this 2-mile reclaimed water pipeline. King County constructed a water main system to provide reclaimed water from the Brightwater Treatment Plant in Woodinville to the Sammamish Valley. The project is located in four separate jurisdictions: Bothell, Woodinville, Redmond, and unincorporated King County. The reclaimed water pipeline route was designed to avoid all direct wetland impacts. Construction of the pipeline began in early 2008. Landscape mitigation was completed in 2009. Wetland and stream buffer impacts were mitigated through stream buffer restoration, which included blackberry removal and the installation of native trees and shrubs along the Sammamish River.

Bellevue Pump Station Update, Bellevue, WA. *Project Biologist.* Bellevue Pump Station, Bellevue, Washington. Ilon was the key biologist for the environmental review and permitting activities associated with capacity and system upgrades at the Bellevue Pump Station and construction of an approximately 5,500-foot-long

force main. Ilon identified sensitive areas (wetlands, streams, listed species) that influenced facility siting, construction and operation; potential permits and agreements needed for the construction of the project; and the strategies and requirements for acquiring all necessary permits. Ilon authored biological portions of environmental and permitting technical memorandums. She also provided biological support for the SEPA Checklist, biological assessment/evaluation, permit acquisition, and associated mitigation.

WSDOT I-405 N. Renton/ Renton to Bellevue, King County, WA. Project Biologist. I-405 Corridor Program Wetland Studies. Ilon was the principal biologist for multiple large-scale transportation projects called the I-405 road improvements and Nickel projects in King County. Ilon performed wetland investigations for the SR 169 to I-90 Renton to Bellevue Project, Kirkland Nickel Improvement Project, Bellevue Nickel Improvement Project, and Renton Nickel Improvement Project. Her duties included identification, delineation, functional assessment, state and local rating for over 100 wetlands along approximately 25 miles of I-405. Field investigations also included an analysis of jurisdictional ditches under Headwaters, Inc. v. Talent Irrigation District or the "Talent Decision". She was the primary author of discipline reports and biology reports in support of environmental assessments and also assisted with development of the mitigation plans for wetland and stream impacts. As part of the Renton Nickel and Bellevue Nickel Improvement Projects she served as wetland biologist on the Interdisciplinary Team (IDT). The IDT involved a team of biologists, design engineers, drainage engineers, and permit specialists that collectively conducted site visits to identify sensitive areas issues during project design.

Lyon and Hall Creek Maintenance Activities, Mountlake Terrace, WA. Project Biologist. ESA was contracted by the City of Mountlake Terrace to provide biological assistance and environmental permit support for stormwater facility maintenance. The City experienced localized flooding problems due to accumulated sediments in three in-stream stormwater detention ponds. Ilon conducted wetland and delineations and prepared a critical areas report to support the City with their application for a Section 404 Nationwide Permit 3 from the US Army Corps of Engineers and a 401 water quality certification from the Department of Ecology.

Grand Ronde Road Pedestrian Safety and Utilities Project, Grand Ronde, OR. *Project Biologist.* ESA was contracted by the Confederate Tribes of the Grand Ronde to perform wetland verifications, determinations and delineations along a portion of the Grand Ronde Road in northwest Oregon. The project included infrastructure and stormwater improvements along 1.5 miles of this county rural road extending across Polk and Yamhill counties. The major renovations include widening travel lanes; adding bike lanes, curbs, and sidewalks; modifying stormwater drainage, and upgrading sewer and water lines. Ilon assisted with wetland investigations and prepared the wetland report summarizing the previous investigations and sensitive areas in the project area. The report also included a discussion of regulatory implications and permitting considerations.

Cemetery Creek Sewer Trunk Line, Snohomish, WA. *Project Biologist.* ESA was contracted by the City of Snohomish to investigate critical areas for a proposed extension of a sewer trunk line in Snohomish County. Ilon delineated wetlands,

identified streams along a 2-mile corridor, and prepared a critical areas study per Snohomish County requirements.

Marysville State Avenue Improvements, Marysville WA. *Project Biologist.* The City proposed to widen State Avenue in north Marysville to improve traffic management and provide for anticipated traffic volumes in the future. Ilon conducted a wetland investigation and impact assessment of the proposed improvement areas and assisted with environmental studies and documentation for the preliminary engineering phase of the project as well as final design. Documentation includes SEPA, NEPA and a Biological Assessment to comply with state and federal funding requirements. She coordinated with the U.S. Army Corps of Engineers on wetland permitting issues and assisted the City in its first effort at utilizing a wetland bank to satisfy mitigation requirements. The City subsequently contracted ESA to provide support for the environmental components of final design and permitting.

Kaiser Road Pump Station, Thurston County, WA. *Project Biologist*. Ilon was the task leader for the critical areas investigations for the LOTT Kaiser Road Pump Station relocation project. The project proposed relocation of an existing pump station to alleviate safety, visual, and operational issues. ESA completed a SEPA Environmental Checklist for the project and prepared a preliminary Critical Areas Study per Thurston County code requirements.

North County Park and Ride Siting Study, Snohomish County, WA. Project Biologist. Community Transit contracted ESA to assist them with a siting study for a new park and ride in Snohomish County. In the first phase of the project Ilon coordinated with design engineers and transit planners to review 18 sites in northern Snohomish County for development of new park and ride transit center facilities. She identified potential environmental constraints, including wetlands and streams, on the 18 sites. She subsequently performed investigations of the two preferred sites and continues to assist Community Transit in coordination with the Federal Transit Administration.

Richmond Beach Bridge Replacement, Seattle, WA. *Project Biologist.* ESA was contracted by the City of Shoreline to provide environmental documentation and permit assistance for a proposed bridge replacement project. Ilon performed a wetland reconnaissance of the project vicinity and documented findings in a technical memorandum to support environmental compliance as required by the City. Ilon also authored a biological assessment no-effect letter to meet federal permitting requirements.

Slater Trunk Sewer Line, Kirkland, WA. *Project Biologist.* Ilon served as project manager for an encasement extension of sewer pipeline near I-405 in the City of Kirkland. She performed wetland delineations and developed a wetland report analyzing impacts and recommended mitigation. Ilon also assisted the City of Kirkland Department of Public Works with the SEPA checklist and provided ongoing support for permitting documents.

Marysville 67th Avenue Water Line and Road Rehabilitation, Snohomish County, WA. *Project Biologist*. Ilon conducted wetland delineations along a 2-mile corridor in Snohomish County for a proposed water pipeline and road rehabilitation project. The project included areas of historical peat deposits and evaluation of ditches jurisdictional under Headwaters Inc. v. Talent Irrigation District.

Mountlake Terrace Park-and-Ride Expansion Project, Mountlake Terrace, WA. *Project Biologist.* Ilon provided wetland expertise for the Mountlake Terrace Parkand-Ride Expansion Project, a Community Transit project providing a parking garage at an existing park-and-ride facility. She conducted wetland delineations and prepared a technical memorandum for the project. Ilon worked with Community Transit staff to determine constraints and opportunities at the site.

Penny Creek Culvert Replacement Project, Mill Creek, WA. *Project Biologist.* ESA was contracted by the City of Mill Creek to perform wetland and stream studies for the Penny Creek culvert replacement project. Ilon assisted with wetland delineation and flagging of the ordinary high water mark (OWHM) of Penny Creek along with developing a technical memorandum summarizing the sensitive areas. Ilon also assisted with preparing a matrix summarizing the permits and special studies that could be necessary to complete the project based on the selected alternative.

Holly Drive Pedestrian Improvements Project, Everett, WA. Project Biologist. ESA was contracted by the City of Everett to identify potential environmental impacts of the proposed improvements to Holly Drive in Everett, Washington. Impacts to wetlands and vegetation, as well as any special habitats present in the vicinity, were evaluated and mapped. Ilon produced a technical wetland report to meet environmental documentation requirements.

I-5 Sutherlin to Roseburg Rare Plant Surveys, Douglas County, OR. *Project Biologist.* Ilon was part of a three-person field crew that surveyed for rare plants along a 10-mile section of the I-5 right-of-way between Sutherlin to Roseburg. ESA was contracted by the Oregon Department of Transportation (ODOT) to conduct required plant surveys as part of the environmental documentation for proposed improvements along the roadway. The five target plant species included the following: Hitchcock's blue-eyed grass, Koehler's rock cress, slender meadow-foam, rough-popcorn flower, and red-root yampah.

Wetland Delineation and Mitigation

Freund Marsh in Oak Harbor, Oak Harbor, WA. *Project Manager.* Ilon served as project manager and lead biologist for this historic wetland project on Whidbey Island. She conducted a wetland delineation and functional assessment of the Freund Marsh, a 40-acre freshwater marsh located adjacent to Oak Harbor Bay. The property has a history of agricultural use and several ditches have been excavated to control surface water on the property. Ilon met with City staff to discuss opportunities and constraints of the site for a proposal regional stormwater facility and provided potential permit strategies and restoration opportunities.

Coal Creek Streambank Stabilization, Bellevue, WA. Senior Biologist. Ilon was the lead wetland biologist for this project that assisted the City of Bellevue with environmental documentation, landscape design, and permitting of a bank stabilization project in upper reaches of Coal Creek in King County. The project is part of the City of Bellevue program to control excessive erosion in Coal Creek and the subsequent transport of sediment along the stream to Lake Washington. The

purpose of the project is control sediment resulting from mine waste deposited along the stream banks of the upper reach of Coal Creek when that area was an active coal mine region. Ilon conducted wetland delineations and developed permit documentation for permits from the Corps of Engineers, Department of Ecology, Department of Fish and Wildlife, and King County.

Meadow Springs Residential Development, Kittitas County, WA. *Project Manager.* Ilon served as project manager for this project that required wildlife and wetland studies near Cle Elum, Washington. The 250-acre project area contained undeveloped conifer forest, extensive wetlands, and required expertise in eastern Washington flora and proficiency in the use of the Department of Ecology's Wetland Rating System for Eastern Washington. Ilon led a team of biologists to conduct wildlife habitat assessment, wetland delineations, evaluations, and preparation of a technical report to support permit applications.

La Tourelle Residential Development, Tukwila, WA. *Project Manager*. Ilon served as project manager for this complex subdivision project in Tukwila, Washington. The project area had numerous constraints including steep slopes and multiple isolated wetlands, resulting in significant coordination with the design team to avoid and minimize impacts to critical areas during site layout. Ilon led a team of biologists to conduct wetland delineations, evaluations, and preparation of a technical report for local permit applications. She also coordinated with the Corps of Engineers during their jurisdictional determination of isolated wetlands on the site.

Auburn Airport Property, Auburn, WA. *Project Manager.* Ilon served as project manager and lead biologist for an investigation of wetlands on a 30-acre undeveloped parcel near the Auburn Municipal Airport. The project area contained large forested and scrub-shrub wetlands and required intensive soil investigation to determine wetland boundaries. ESA provided a critical areas report to meet City of Auburn requirements. The City subsequently contracted ESA to provide site development assistance including potential permit strategies, mitigation development, and eventual final design. Ilon authored a comprehensive memo describing site opportunities and constraints, and worked with landscape architects to develop a site design. She outlined local, state, and federal permits that would be needed and provided a timeline to the City.

Wetland Mitigation Banking Program, Tukwila, WA. Project Biologist. ESA was contracted by the City of Tukwila to provide technical support for the creation of a mitigation banking program. Ilon assisted with evaluation of three city-owned sites for the potential of providing compensatory wetland mitigation. This included determining the amount of land available for wetland creation and enhancement on each of the sites, general creation and enhancement approaches that could be taken at each site, and the estimated cost to implement creation or enhancement activities on each site.

Brooten Property Wetland Delineation, Kent, WA. *Project Manager.* Ilon served as project manager and biologist for a wetland investigation of a 4-acre property in the city of Kent. The purpose of the study was to identify critical areas necessary for permitting an approximately 600 square foot addition to an existing single-family residence. Ilon performed wetland delineation and identification of stream

boundaries and prepared a letter characterizing the wetland and summarizing City of Kent regulations.

Guzman Property, Marysville, WA. *Project Biologist.* ESA was contracted by the City of Marysville Department of Public Works to investigate wetland resources present on the Guzman Property in the city of Marysville. This investigation was conducted to assist the City in evaluating the potential use of this site for use as a regional detention pond. Ilon performed wetland delineation and prepared a technical wetland report summarizing the findings.

Joint Study of Salmon Creek, Okanogan County, WA. As part of a hydrologic study of Salmon Creek in Okanogan County, llon identified and delineated wetland areas on 10-acres for a proposed reregulating reservoir. She produced a technical report and identified wetland impacts, outlined the permitting process, and investigated potential mitigation planning. Ilon presented the report and mitigation planning ideas at a meeting of the Joint Committee, composed of the Colville Confederated Tribes and the Okanogan Irrigation District. Not ESA Job

BP Cherry Point Refinery Wetland Studies, Whatcom County, WA. Project Biologist. Ilon conducted several wetland delineations for multiple projects for the BP Cherry Point Refinery over a three-year period. BP owns several thousand acres surrounding the Refinery mainly consisting of forest and degraded meadow, which are pockmarked with wetlands. Projects included construction of material storage areas needed for a 720-megawatt power plant; a 5-mile long transmission line corridor for proposed upgrade of existing transmission lines; and two 1.7-mile routes proposed for a sewer pipeline to connect the Cherry Point Refinery and the Birch Bay Sewage Treatment Plant. Ilon developed technical characterizations and identified potential impacts in multiple wetland assessment reports. She completed a wetland mitigation plan, alternatives analysis, and permitting process for the sewer pipeline. Ilon also performed baseline and first year monitoring events for 4.6-acre compensatory wetland mitigation site on BP property. The site is compensation for construction of a power transmission substation, transmission support structures, and access roads. Monitoring events included identification and estimation of planted vegetation coverage and survival, and hydrologic monitoring. Not ESA Job

Muckleshoot Indian Reservation Wetland Studies, Auburn, WA. *Project Biologist.* Ilon provided wetland expertise and permitting support during a multiyear on-call contract with the Muckleshoot Tribe. She performed numerous wetland reconnaissance and delineation investigations on the Muckleshoot reservation in Auburn, Washington. The Muckleshoot Tribe owns approximately six square miles near the White River. Projects included a new Natural Resources Building, single-family housing developments, a proposed gas station, and expansion of an existing church. Ilon developed technical wetland reports and provided permit guidance with each project. Not ESA Job

Wildlife Survey and Habitat Assessment

Olympia Regional Airport Streaked Horned Lark Surveys, WA. Senior Ecologist. The Port of Olympia is performing taxiway reconstruction and other maintenance acitivities at the Olympia Regional Airport. The airport provides habitat for two federally-listed species: Olympia pocket gopher and streaked horned lark. ESA performed field surveys to document the location and intensity of streaked horned lark activity at the airport to inform construction sequencing and other activities. The surveys were required by US Fish and Wildlife Service (Service) and a strict protocol was followed. ESA biologists participated in a one-day training led by the Service regarding species identification, survey protocol, and procedures for agency communication. Ilon led the field team, coordinated with federal biologists on survey results, and produced daily reports.

Bowerman Field Airport Improvements, Hoquiam, WA. *Project Manager.* The Port of Grays Harbor (Port) is planning several improvements at Bowerman Field located in Hoquiam, Washington. The airport was built by the Corps of Engineers in the 1940s on Moon Island, with substantial additional dredged fill imported to connect the island to the shoreline. Bowerman Field today is situated on a peninsula of land that separates Bowerman Basin from the Grays Harbor estuary and the mouth of the Chehalis River. The Grays Harbor National Wildlife Refuge, a major resting area for migrating shorebirds and a waterfowl concentration area, encompasses 1,500 acres of intertidal mudflats, salt marsh, and uplands in Bowerman Basin. Ilon is managing a team of biologists and cultural resources specialists to perform wetland delineation and conceptual mitigation development; biological evaluation; and, cultural resource assessment. Ilon also conducted presence/absence surveys for streaked horned lark at the airport. ESA prepared the Categorical Exclusion to meet FAA NEPA requirements and prepared local permit applications necessary to complete the proposed improvements.

North Creek Interceptor Oregon Spotted Frog Surveys, WA. Senior Ecologist. ESA is providing environmental services to King County Wastewater Treatment Division (WTD) and their proposal to expand sewer capacity in southwestern Snohomish County with a project that will involve open-cut trenching through a wetland complex associated with North Creek. As part of the formal consultation with the US Fish and Wildlife Service under the Endangered Species Act (ESA), Ilon conducted a habitat screening analysis and egg mass survey for the Oregon spotted frog, a species proposed for listing under the Endangered Species Act. The project required adherence to a strict protocol and schedule, and collaboration with state and federal biologists.

Chambers Creek Regional Wastewater Treatment Plant Streaked Horned Lark Surveys, WA. *Senior Ecologist*. At the request of Pierce County Public Works and Utilities, ESA performed field surveys to document the presence or absence of streaked horned lark in the expansion area of the Chambers Creek wastewater facility in University Place, Washington. The surveys were a conservation recommendation in the Endangered Species Act (the Act) "letter of concurrence" issued by the US Fish and Wildlife Service following their review of the Biological Assessment prepared for the project. The streaked horned lark is a rare, endemic subspecies of the horned lark that was listed as threatened under the Act in October 2013. Ilon led a wildlife survey team that performed monthly surveys in the expansion area during the lark breeding season. She performed all of the surveys and produced a summary report describing the methods and results of each survey.

South Magnolia Combined Sewer Overflow (CSO) Bald Eagle Monitoring, Seattle, WA. *Project Biologist.* ESA is provided permitting services to King County's Wastewater Treatment Division (WTD) for the South Magnolia CSO Project , which includes construction of a 1.3 million gallon underground storage tank and an ancillary building located on Port of Seattle property. The project also includes micro-tunneling for the installation of 2,700 lineal feet of conveyance pipe. As part of the environmental review, llon conducted field investigations to document an active bald eagle nest adjacent to the project and developed the required documentation for a "non-purposeful take" permit from the US Fish and Wildlife Service.

BP Cherry Point Facility Wildlife Habitat Management Plan, Whatcom County, WA. Project Biologist. ESA conducted a wildlife habitat study of the BP Cherry Point Refinery property located in Whatcom County, Washington. The assessment focused on 2,225 acres surrounding the refinery. Ilon conducted field assessments and assisted in the preparation of a wildlife habitat report and wildlife management plan to characterize wildlife habitat areas. The report also formulated a management plan to meet the requirements of the Wildlife Habitat Council's™ Wildlife at Work Certification program. The main elements of the management plan included: nearshore survey and characterization; great blue heron rookery monitoring and protection; Terrell Creek restoration; wetlands rehabilitation and creation; and waterfowl habitat enhancement. BP Cherry Point received certification in October of 2009, and received the Wings over Wetlands award in November 2009, recognizing their efforts in wetlands restoration and waterfowl habitat enhancement.

Cedar Watershed Vegetation Survey, North Bend, WA. *Project Biologist.* Ilon was a key biologist in this long-term vegetation survey of the Cedar River watershed for Seattle Public Utilities (SPU). ESA was contracted to assist SPU with a systematic vegetation survey of the 90,546-acre watershed using standard scientific methods and permanent sample plot protocols for vegetation sampling. The survey included 70 permanent sampling plots located in forested areas throughout the watershed. Each plot location was permanently marked with rebar and was recorded using a Trimble Global Positioning Unit (GPS) unit; up to 40 trees were permanently tagged; tree species and diameter at breast height were recorded; the height, age, and 10- and 20-year growth rates of representative trees were recorded; and coarse woody debris and tree saplings were sampled in belt transects.

Approach No. 15 Improvements, Chehalis-Centralia Airport, Lewis County, WA. *Project Biologist.* ESA provided environmental documentation and permit support for proposed improvements to Approach No. 15 at the Chehalis-Centralia Airport in Lewis County, Washington. The project was completed under a contract with the airport. The airport received a grant from the Federal Aviation Administration (FAA) to assist with the acquisition of land for the purpose of establishing a Runway Protection Zone (RPZ) on the north end of the airport. In addition to land acquisition, the project included the removal of airspace obstructions. Ilon conducted a site visit to investigate the location and nesting activity of a known bald eagle nest within the runway flightpath. ESA prepared a Biological Assessment to assist with interagency coordination efforts required under Section 7 of the Endangered Species Act of 1973 (ESA) between the federal lead agency (FAA) and the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS). In addition, NEPA Categorical Exclusion Checklist was prepared for the project. **Ridge at Lake Sawyer Residential Development, King County, WA**. *Project Biologist*. Ilon conducted wildlife field studies including a habitat assessment and wildlife survey for species of local importance on this 200-acre forested site proposed for residential development. She was the principal author of the wildlife habitat report, which included the results of the field studies and a review of applicable King County Code and Comprehensive Plan requirements.

Lake Youngs Reservation Ecological Studies, Kent, WA. *Project Biologist*. Ilon conducted wildlife habitat field studies and a wetland investigation of the 2,460-acre Lake Youngs Reservation for Seattle Public Utilities. The reservation is located on the Kent Plateau and contains a large lake surrounded by a matrix of mature forest, streams, and wetlands. Wildlife studies included a comprehensive habitat assessment, vegetation type mapping, and wildlife observations. Wildlife surveys included early morning bird surveys, evening bat surveys using a D-100 bat detector, and owl surveys using recorded calls at 21 survey stations representing different habitat types. Wetland reconnaissance included compilation of existing information, wetland mapping, and ground-truthing. Ilon was the primary author of the technical report documenting field methods, findings, and reservation resources.

Seagrass Development Bird Surveys, Blaine, WA. Project Biologist. Ilon conducted bird and habitat surveys and assisted with a bird impact assessment for the proposed Seagrass residential development on Semiahmoo Spit in Blaine, Washington. The development would be 20-acres in size, span the width of the spit, and include 68 residential units, underground and surface parking, access roads, public trails, a public park, landscaping, and stormwater treatment facilities. The Drayton Harbor and Semiahmoo Bay tidelands surrounding Semiahmoo Spit are attractive to large numbers of migrating and resident marine birds and shorebirds. A total of 23 bird surveys were conducted at six stations on the spit during low and high tide conditions during the fall, winter, and spring seasons.

South Bay Aqueduct Improvement and Enlargement Project, Alameda County, CA. Project Biologist. ESA provided environmental permitting and compliance to the California Department of Water Resources for the improvement and enlargement of a water conveyance system that serves the Livermore-Amador Valley area of eastern Alameda County. The work areas for the project are within sensitive habitats for several state and federally threatened or endangered species, including San Joaquin kit fix, California tiger salamander, California red-legged frog, and western burrowing owl. Ilon assisted the compliance team with burrowing owl exclusion protocol through the installation of one-way doors and reducers on burrows within the project corridor.

Marin Development Bird Surveys, Blaine, WA. Project Biologist. Ilon conducted bird and habitat surveys for the Marin condominium development on Semiahmoo Spit in Blaine, Washington. The 3.6 acre Marin development includes 54 condominium units in three multistory buildings and Low Impact Development (LID) measures such as underground parking and biofiltration swales for maintaining a high level of stormwater quality treatment. The surveys were conducted at low and high tides and at six stations located by GPS in various habitats on the spit. Ilon developed a letter report documenting observations and provided an assessment of potential impacts of the proposed development. **Dearborn Park Wildlife Assessment, Seattle, WA.** *Project Biologist.* Ilon conducted a wildlife habitat assessment for the proposed addition to the Dearborn Park Elementary School in Seattle's Beacon Hill neighborhood. The area is within a mapped environmentally critical area (ECA) in the City of Seattle. Ilon conducted a field investigation and prepared a review letter evaluating impacts and mitigation to meet City of Seattle requirements.

Beach Drive Wildlife Assessment and Wetland Study, Seattle, WA. *Project Manager.* Ilon served as project manager and biologist for a wildlife habitat assessment of a g-acre site that is proposed for short plat development in West Seattle. The applicant was required to conduct the assessment because the property is within a mapped wildlife corridor in the City of Seattle. Ilon conducted a field investigation and prepared a review letter to meet City requirements. Ilon was subsequently contracted two years later to conduct a wetland reconnaissance investigation on the same property and prepared a wetland report.

Carner Wildlife Assessment, Seattle, WA. *Project Biologist.* Ilon performed a wildlife habitat assessment for a proposed short plat development application in Seattle's Beacon Hill neighborhood. The applicant was required by the City of Seattle to conduct the assessment because the property is within a mapped wildlife corridor. Ilon conducted a field investigation and prepared a review letter to meet City requirements.

Commencement Bay Monitoring, Tacoma, WA. *Project Biologist.* Ilon assisted with long-term monitoring of bird use of three mitigation sites constructed by the National Oceanic and Atmospheric Administration (NOAA) Damage Assessment and Restoration Center and the Commencement Bay Natural Resource Trustees. Monitoring included collecting bird count data at the three sites in spring, summer, and autumn in mud flat, estuarine wetland, and riparian upland habitat. Bird species, including osprey, cliff swallow, spotted sandpiper, and American pipit among many others, were identified by sight or call. The data was incorporated into annual reports describing the results of the mitigation monitoring and comparing the results to the overall goals and objectives of the project.

Holden Mine Remedial Investigation/Feasibility Study Bat Monitoring, Holden, WA. *Project Biologist.* Ilon was the lead biologist of a one-year survey plan for bat presence in an abandoned copper mine near Holden, Washington. The mine site is located in the North Cascades in a steep-sided glacial valley on Forest Service land bordering the Glacier Peak Wilderness Area. Ilon installed remote sensing equipment inside mine stopes and tunnels, requiring seasonal visits inside the mine. She conducted equipment research, developed a work plan, and composed summary reports after each monitoring visit. She also assisted with winter internal mine survey conducted by bat experts from the US Forest Service and Bat Conservation International.

Reith Wind Power Project, Pendleton, OR. *Project Biologist.* Ilon conducted wildlife surveys, vegetation identification, and habitat mapping for a large wind power generation plant in eastern Oregon. Wildlife target species included Washington ground squirrel, grasshopper sparrow, and burrowing owl. All wildlife species were recorded and mapped, as well as possible nesting sites. Handheld GPS units were used for navigation and data recording. The project area included native grasslands, scablands, and conservation reserve program (CRP) lands.

Green River Watershed Bird Survey and Habitat Inventory, WA. *Wildlife Biologist*. Plum Creek Timber Company contracted the University of Washington to conduct habitat inventories and wildlife surveys on its timberlands in the Green River Watershed. The purpose of the project was to verify Plum Creek's existing Habitat Conservation Plan (HCP). Ilon conducted bird point count surveys by aural and visual identification in the watershed for three months. She also conducted nest searching and mapping. The project also included a survey of vegetation and an inventory of wildlife habitats.

Third-Party Wetland Review Services On-Call Contracts, WA. Project Biologist. ESA has a long history of providing assistance to the planning departments of several cities in Western Washington through long-term on-call contracts. This work addresses wetlands, streams and other sensitive areas and provides guidance to the cities in administering sections of the zoning code. Projects include evaluating environmental effects of new development proposals, as well as approving, monitoring, and evaluating the effectiveness of mitigation projects in the City. Ilon has performed numerous sensitive area reviews covering a variety of environmental issues, including wetland delineation verifications, proposed buffer modifications, critical areas exemptions, and shoreline exemptions. Current and past jurisdictions where Ilon has provided expertise include:

- City of Bellevue
- City of Federal Way
- City of Kenmore
- City of Kent
- City of Kirkland
- City of Lake Forest Park
- City of Newcastle
- City of Mountlake Terrace

Training

- Ordinary High Water Mark Training, Department of Ecology
- Using the Credit-Debit Method for Estimating Mitigation Needs, Coastal Training Program
- Using Hydric Soil Field Indicators, Coastal Training Program
- Reviewing Wetland Monitoring and Mitigation Plans, Coastal Training Program
- Washington State Wetland Rating System Revised 2004, Department of Ecology
- Talent Ditch Discussion and Field Verification, Corps of Engineers and Washington State Department of Transportation
- Advanced Soils and Hydrology, Wetland Training Institute
- Wetlands: Grasses, Sedges & Rushes, Everett Community College

EXHIBIT K



EDUCATION

M.A., Museology, University of Washington

B.A., Art History (with distinction), University of Washington

14 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Pacific Northwest Historians Guild

Katherine Wilson, MA

Historian/Senior Museum Specialist

Katie has fourteen years of professional experience working with cultural resources in Washington; she brings significant expertise in historical research of the Puget Sound region. She is skilled at conducting archival research at the region's main repositories and excels in identifying supplemental archival documents that improve ESA's knowledge and understanding of relevant, project-specific cultural resource issues. Katie has authored over 100 technical reports, including intensive research for several archaeological data recovery projects in the greater Seattle area. As a professional museum specialist, Katie provides expertise in archaeological collections management including preparing collections for permanent curation at designated repositories. She has prepared numerous collections for curation at the Burke Museum of Natural History and Culture and is familiar with their published curation guidelines. Katie has a Master's degree in Museology and exceeds the Secretary of the Interior's Standards for Professional Historian.

Relevant Experience

New Long Beach Civic Center Project, Long Beach, CA. *Senior Museum Specialist.* ESA is providing the City of Long with technical expertise and inventory of City-owned historic items that will be impacted by construction of a new civic center. Work is phased by building construction schedules. Katie has provided project management services for digitization of the Public Library's nitrate negatives and drafted specifications to be used by contracted movers handling the historic items. Additional tasks have included coordinating cost estimates for conservation of the Public Library's Works Progress Administration-funded murals.

Park Street Roundabout, North Bend, WA. *Historian.* This project proposes a new roundabout on North Bend's Park Street. Katie served as cultural resources task lead and historian for an assessment of potential impacts. The project is subject to Section 106 of the National Historic Preservation Act.

Cheasty Trail Mountain Bike and Pedestrian Trail Pilot Project, Seattle, WA. *Historian.* Katie provided a brief historical review for a proposed trail within Seattle's Cheasty Natural Area. She prepared content for relevant sections of the project's SEPA checklist.

Mercer Island Center for the Arts Project, Mercer Island, WA. *Historian.* Katie provided a brief historical review for proposed construction within Mercerdale Park on Mercer Island. She prepared content for relevant sections of the project's SEPA checklist.

Tollgate Farm Trail Extension, North Bend, WA. *Historian.* This project proposed new trail construction within the boundaries of Tollgate Farm, a late

1800s farmstead and recorded archaeological site. Katie reviewed a series of past archaeological investigations to develop expectations specific to the trail location.

Georgetown Wet Weather Treatment Station, Georgetown, WA. *Historian.* Katie provided research for a complex area along the Duwamish River. The project required an understanding of the former river modifications, dredging and fill activities, and development of an early King County Poor Farm.

Duwamish Gardens Habitat Restoration, Tukwila, WA. *Historian.* Katie provided supplemental research for a phased project along the Duwamish River adjacent to a known Precontact-era archaeological site (45-KI-703).

Cedar River Corridor Literature Review, King County, WA. *Historian.* Katie prepared a high-level summary of the Native American use of the Cedar River during the precontact and ethnographic eras.

Brown's Point Lighthouse, Tacoma, WA. *Historian.* For this cultural resources survey, Katie researched and summarized the historic context of Brown's Point, which has featured a lighthouse since the 1880s. Her research included reviewing the logs of the lighthouse keeper for discussion of property improvements and existing structures on the property before the lighthouse was established.

Chehalis Basin Strategy Programmatic Environmental Impact Statement (EIS), Seattle, WA. *Historian.* Katie provided research for the historic and cultural resources element of this programmatic EIS. Her work included summarizing the Native American and historic use of the Upper Chehalis River.

Seattle Mandatory Affordable Housing Environmental Impact Statement (EIS), Seattle, WA. *Historian.* Katie served as lead author for the historic and cultural resources element of this proposed policy change project. Her work included summarizing the City-wide affected environment and analyzing potential impacts to historic and cultural resources.

Fort Steilacoom Park, Lakewood, WA. *Historian.* Katie provided historical research for this project within the Fort Steilacoom Historic District. The project was located on a 19th century fort that later became Western State Hospital. The project was conducted to meet the requirements of Section 106 of the Historic Preservation Act.

Kenyan Community International Church, Kent, WA. *Historian.* Katie provided historical research for this project along State Route 509. The project required a permit from the US Army Corps of Engineers and was conducted to meet the requirements of Section 106 of the Historic Preservation Act. The project identified one historic-era archaeological site. The site was recommended not eligible for listing in the National Register of Historic Places.

S 216th Street Segment 3 Improvements, Des Moines, WA. *Historian.* Katie provided historical research for this project in Des Moines. The project was conducted to meet the requirements of Washington Governor's Executive Order 05-05.

7118 Beacon Avenue, Seattle, WA. *Historian.* Katie provided historical research for proposed development in Seattle's Beacon Hill neighborhood. The project involved researching and assessing an existing building from the 1950s used for as

a grocery and neighborhood shopping center. The project was documented for review by the Seattle Landmarks Board, who designated the property a landmark.

1903 5th Avenue, Seattle, WA. *Historian.* Katie provided historical research for this proposed development project in downtown Seattle. The project was conducted to meet the requirements of the State Environmental Policy Act (SEPA).

Interstate 90 Peak Use, Issaquah, WA. *Historian.* Katie provided historical research for this project along Interstate 90, west of Issaquah. The project was conducted to meet the requirements of Section 106 of the Historic Preservation Act.

East Orchard Dive, Bellingham, WA. *Historian.* Katie provided historical research for this project along Squalicum Creek east of Interstate 5. The project involves phased trail development; this project assessed an off-site wetland mitigation area on former farmland. Katie served as historic and cultural resources task lead.

Y-9 Levee, Yakima, WA. *Historian.* Under an on-call with Yakima County, Katie provided supplemental historical research for improvements along the Yakima River.

Clallam County Shoreline Master Plan Update, WA. *Historian.* Katie provided a brief description of cultural resources affected environment for inclusion in a shoreline master plan update.

Seattle Center Arena Environmental Impact Statement, Seattle, WA. *Historian.* Katie provided the historic and cultural resources affected environment and potential impacts analysis for a proposed new arena at Seattle Center. The project would involve direct impacts to designated Seattle Landmarks. Katie served as historic and cultural resources task lead.

Turner Creek Diversion Pipe, Hillsboro, OR. *Historian.* Katie provided historical research for this project along an old oxbow of Turner Creek. The project was located near a 20th century cemetery.

Springwater Corridor Bridge Replacement, Portland, OR. *Historian.* Katie provided historical research for a bridge replacement project along Johnson Creek, east of Portland.

Bend Interceptor Rehabilitation, Bend, OR. *Historian.* Katie provided historical research for improvements to 13,000 linear feet of a historic irrigation canal east of Bend, Oregon. The North Unit Main Canal was constructed in 1938-1946 by the Works Progress Administration.

NE Kane Drive at Kelly Creek, Gresham, OR. *Historian.* Katie provided historical research for a culvert replacement project near Mt Hood Community College. The project was funded through the Oregon Department of Transportation. No cultural resources were encountered. Katie served as cultural resources task lead.

Roseburg Airport Master Plan, OR. *Historian.* Katie provided historical research of this mid-20th century regional airport in Roseburg, Oregon. The project was located along on old Native American trail and immigrant wagon road. The project was conducted to meet the requirements of Section 106 of the Historic Preservation Act.

Pendleton Airport Runway, OR. *Historian.* Katie provided historical research of this mid-20th century regional airport. The project was located along on old immigrant wagon road. The project was conducted to meet the requirements of Section 106 of the Historic Preservation Act.

7118-7144 Beacon Avenue S Historic Property Review, Seattle, WA. *Historian.* Proposed development at this property required Seattle Landmarks Preservation Board review of an existing 1957/1958 grocery store. ESA prepared an eligibility referral to evaluate the building per Landmarks register criteria. Katie provided the historical context for this mid-century grocery within Seattle's Beacon Hill neighborhood. The building was recommended Not Eligible.

South Treatment Plant Biogas and Heat Systems Improvements Project, King County, WA. *Historian.* Katie provided a cultural resources literature review for the planned expansion of an existing wastewater treatment facility. The plant is located at the former confluence of the Black and Green Rivers near the sound end of Lake Washington, which was high-use area during the ethnographic period.

East Fork Irrigation District Highline Ditch, Hood River, OR. *Historian.* Katie provided historical research of this late 19th century earthen irrigation ditch. The resource was recorded as historic property and recommended Not Eligible for listing in the National Register of Historic Places.

Spring Hill Natural Area Enhancement Project, Washington County, OR. *Historian.* Katie prepared a literature review for this proposed enhancement project. The project was located near Scoggins Creek and the Tualatin River in an area considered to have a high sensitivity for cultural resources. The report was submitted to Clean Water Services under an on-call contract.

Lander Street Grade Separation Project, Seattle, WA. *Historian.* For this project in Seattle's industrial SODO neighborhood, ESA inventoried 18 historic-aged properties within the project Area of Potential Effects, including a railroad segment. Katie researched and summarized the historic context of the study area and provided tenant histories for the recorded properties. One property was recommended eligible for listing in the National Register of Historic Places however, ESA recommended the project would have No Effect.

SDOT Madison Bus Rapid Transit (BRT) Design, Seattle, WA. *Historian.* In support of a proposed 2.3-mile Bus Rapid Transit project through downtown Seattle, ESA prepared a cultural resources assessment to address potential impacts to historic properties within the project area. The corridor is one block northwest of the Pioneer Square Skid Road Historic District. The assessment included background research of the project area and an intensive inventory of 83 historic properties. Katie reviewed and summarized the historical context of the properties and overall project area.

City of Snoqualmie Riverwalk Design & Engineering Services, WA. *Historian.* ESA is assisting the City with its design of a trail along the Snoqualmie River. The project is phased with different funding sources and cultural resources regulations. For the first phase, Katie assessed the comprehensive history of the proposed area, including a 1850s fort, 1880s hop farm, and development of the town of Snoqualmie as it pertains to historic resources in the study area. For the second phase, ESA inventoried over 20 properties in the study area. Currently, ESA is planning the subsurface archaeological testing of the proposed alignment. **Energize Eastside Environmental Impact Statement (EIS), Bellevue, WA.** *Historian.* For this Puget Sound Energy project, Katie summarized hundreds of potential aboveground historic resources within multiple transmission line alternatives. Alternatives spanned from Redmond to Renton. Her work included summarizing potential impacts to resources listed and eligible for listing in National and local historic registers.

SPU Ship Canal Project, Seattle, WA. *Historian.* A cultural resources assessment was done in preparation for construction of an underground storage tunnel in Seattle. Katie prepared historic context statements for the proposed alternatives.

North Bend City Sewer Treatment Facility, North Bend, WA. *Historian.* Katie conducted historical research and prepared a technical memo for proposed improvements to the existing sewer treatment facility.

Terminal 115 / W Michigan Combined Sewer Overflow, Seattle, WA. *Historian.* Katie performed literature reviews for two large project areas in Seattle's South Park and Highland Park neighborhoods. Research topics included modifications to the historic Duwamish River channel, park development, and industrial sites.

Anderson Road Shop Access Project, Ellensburg, WA. *Historian.* For this cultural resources assessment, Katie performed historical research and prepared the historic context statement for this subject property, located along Wilson Creek.

Coal Creek Trunk Upgrade Project, Bellevue, WA. *Historian.* For this cultural resources assessment, Katie performed historical research and prepared the historic context statement for this subject property, located along Coal Creek.

Mt. Si High School Cultural Resources Assessment, North Bend, WA. *Historian.* Katie prepared a supplemental historical research for an archaeological survey of the Mt. Si High School athletic fields in advance of proposed demolition. Research was conducted as a supplement to a previous literature review.

Mt. Si High School Cultural Resources Literature Review, North Bend, WA. *Historian.* Katie prepared a cultural resources literature review of the Mt. Si High School and athletic fields in advance of proposed demolition. Research topics included the Snoqualmie Hop Ranch, Fort Alden, early transportation routes, and development of the town of North Bend.

1405 Dexter Avenue N, Seattle, WA. *Historian.* Katie performed historical research of the subject property, located within Seattle's West Lake neighborhood. The property was constructed in 1920 and was recommended Not Eligible for listing the National Register of Historic Properties or as a Seattle Landmark.

Arboretum Waterfront Trail Project, Seattle, WA. *Historian.* Katie prepared a cultural resources literature review of a proposed waterfront trail along the northern boundary of the Washington Park Arboretum. Research topics included historical dredging activities, trail and island development, and recreational use.

Redmond Municipal Airport / Roberts Field Project, Redmond, OR. *Historian.* For this master plan project, Katie prepared a brief summary of known cultural resources recorded within the airport boundaries and areas of sensitivity for unrecorded resources.

Mercer Island Treehouse Cultural Resources Assessment Project, Mercer Island, WA. *Historian*. Katie conducted a literature review of a proposed private development project on Mercer Island.

Pike Place Waterfront Construction, Seattle, WA. *Historian.* Katie performed intensive research of archaeological site 45-KI-1161, buried 40 feet below current street grade in downtown Seattle. She identified former 1880s squatters and later a temporary railroad camp occupied during construction of the Great Northern Tunnel beneath the City. She reviewed assorted primary sources ranging from census records, city directories, obituaries, newspapers, city ordinances and resolutions, photographs, maps, engineering records, and railroad archives.

Arboretum Loop Trail Cultural Resources Project, Seattle, WA. *Historian.* This project studied a 1.2 mile long trail proposed by Seattle Parks within the Washington Park Arboretum. In order to assess the level of effort needed within this historically-significant park, Katie prepared a comprehensive historical review of known cultural resources, synthesizing the extensive existing background information for the project area. The projects area included a historic landfill, areas sensitive to multiple Tribes, and landscape features associated with the park design.

Port of Friday Harbor Airport Improvements Project, Friday Harbor, WA. *Historian.* This project assessed multiple improvements proposed at the Friday Harbor Airport over a 5-year period. Katie conducted historical research of the airport property in order to assess potential impacts to resources from the proposed projects.

City of Anacortes Guemes Channel Trail, WA. *Historian.* This project assessed a segment of a phased shoreline trail at Ship Harbor. Katie conducted historical research of the study area in order to assess potential impacts to a former fish cannery located within the study area.

Birch Bay Drive & Pedestrian Facility & Beach Nourishment, Whatcom County, WA. *Historian.* ESA is designing a sustainable 1.6-mile soft shore protection berm along Birch Bay to reduce storm/flood damage, improve pedestrian safety, enhance shore access, improve stormwater drainage, and protect water quality while improving natural coastal geologic and ecological processes. Katie researched and presented the complex history of the study area which presents multiple Precontact and historic-era cultural resource concerns.

Lower Russell Road Levee Setback, Kent, WA. *Historian.* For this levee improvement project along the Green River, Katie researched the potential cultural resource impacts from three proposed alternatives. Research findings indicate the area has a high potential for both Precontact and historic-era cultural

resource concerns, ranging from former village sites, townsites, ferry landings, and homestead/farmsteads.

Judd Creek Habitat Enhancement Cultural Resources, Vashon Island, WA. *Historian.* This project proposed to improve habitat at the mouth of Judd Creek in Quartermaster Harbor. Katie researched the study area and identified a high potential for both Precontact and historic-era cultural resources within the project area, ranging from former village sites, fish weirs, bridges, homesteads, and lumber mills.

Maury Island Natural Area Fill Removal Archeological Services, Vashon Island, WA. *Historian.* This project is located on the shoreline of Maury Island within an area used for gravel mining since at least 1910. The project proposed to remove existing pilings and ruins of a dock, which were recorded as an archaeological site.

Lewis Creek Cultural Resource Assessment, Issaquah, WA. *Historian.* This project is located on the south end of Lake Sammamish along Lewis Creek. Katie researched the history of land use for the study area; her results identified a former sawmill within the project area. This information assisted with developing field methodology and interpreting results.

Klapp Property Habitat Enhancement Cultural Resources Risk Assessment, Redmond, WA. *Historian*. This project was located at the confluence of Bear Creek and Mackey Creek in Redmond. Katie researched the project area's history, including summarizing the 1906 Robstad farmstead which stood on the property until its demolition in 2013.

Sound Transit East Link Archaeological Pre-Construction Testing, Bellevue, WA. *Historian/Project Manager.* In support of Sound Transit's light rail construction connecting Seattle with Bellevue, Katie coordinated obtaining rights-of-entry for over 20 individual parcels requiring archaeological testing. She oversaw the scheduling of each location, ensuring compliance with propertyspecific requirements such as parking, permit notifications, and investigation methods. She prepared regular status updates to the client and facilitated completion of all fieldwork within an accelerated schedule.

South Magnolia Combined Sewer Overflow Project, Seattle, WA. *Historian.* Work at this Smith Cove site identified a historic-era low-income residential site within former tideflats. Katie performed intensive supplemental historical research documenting the history of this former sandspit area. She reviewed assorted primary sources ranging from census records, city directories, obituaries, newspapers, city ordinances and resolutions, photographs, maps, and engineering records. Research included visits to the Washington State Archives' Puget Sound Regional Branch, Seattle Department of Planning and Development Microfilm Library, Seattle Public Library Special Collections, Seattle Municipal Archives, Seattle City Clerk's Office, and the King County Roads Map Vault.

Magnolia Combined Sewer Overflow Archaeological Resources Monitoring Plan, Seattle, WA. *Historian.* Katie provided a preliminary historical review of proposed construction on the Magnolia Hill side of Smith Cove. Her archival work identified the former presence of historic and precontact resources within the project area, allowing the Archaeological Resources Monitoring Plan to address and plan for encountering specific archaeological resources.

Licton Springs Park Flood Reduction Project, Seattle, WA. *Historian.* This project is located within an Olmsted Brothers recommended park that is also known for its importance to local tribes, its association with the David T. Denny family, and as the location of a private 1930s health spa. Katie's research included the Seattle Municipal Archives, Olmsted Brothers project correspondence files at the Library of Congress, and drawings on file at the Frederick Law Olmsted National Historic Site's Olmsted Archives.

Denny Substation Environmental Impact Statement (EIS), Seattle, WA. *Historian.* For this project within downtown Seattle, Katie summarized hundreds of potential aboveground historic resources within multiple study areas for four different substation alternatives and three different transmission line alternatives. The resulting study areas include the Olmsted Brothers recommended Cascade Playground, two National Register Historic Districts, and two Seattle Historic Districts. Her work included summarizing the National and local historic register status of study area resources and evaluating for potential impacts to these by the proposed alternatives.

Seattle to Walla Walla Wagon Road Research Project, WA. *Historian.* For this Transportation Enhancement grant-funded project Katie conducted intensive historical map and narrative research of a major 19th century wagon road connecting Walla Walla and Seattle. The road spanned five counties, necessitating research at multiple state, county, and municipal repositories in order to gather historical maps, photographs, and narrative descriptions of the route. Her work was digitized by additional team members to produce a GIS-based map used to relocate and document remaining segments of the wagon road. The final product was disseminated by HistoryLink and available to the public through their Wagon Roads mobile application.

Old Pine Street Archaeological Data Recovery Project, Seattle, WA. *Historian.* As part of Sound Transit's University Link Light Rail project, Katie performed intensive historical research documenting an archaeological site identified in Seattle's Central Business District. She reviewed assorted primary sources ranging from historical building permit history cards, side sewer cards, real property record cards, census records, city directories, obituaries, newspapers, city ordinances and resolutions, photographs, maps, and engineering records. Research included visits to the Washington State Archives' Puget Sound Regional Branch, Seattle Department of Planning and Development Microfilm Library, Seattle Public Library Special Collections, Seattle Municipal Archives, Seattle City Clerk's Office, and the King County Roads Map Vault.

Union Bay Natural Area Assessment, Seattle, WA. *Historian.* As part of the Washington State Department of Transportation's mitigation requirements for its State Route 520 project, Katie investigated of one of Seattle's oldest and largest landfills located in today's Union Bay Natural Area. She reviewed records at the

King County Archives, University of Washington Archives, and Seattle Municipal Archives in order to evaluate the landfill's National Register eligibility.

King Street Station Archaeological Collection Curation, Seattle, WA. *Senior Museum Specialist.* ESA Paragon provided archaeological monitoring of this complex multi-phase construction project to rehabilitate a 1906 train station in downtown Seattle. Katie managed the resulting archaeological items collected during the project and coordinated the artifact analysis. She prepared the collection and associated records for curation at a local repository.

Fairview Avenue Bridges Assessment, Seattle, WA. *Historian.* Located along the southeast shoreline of Lake Union, this project involved researching and evaluating potential impacts to multiple historic properties and recording an archaeological site within the study area. The bridges are immediately adjacent to the Lake Union Steam Plant, a designated Seattle Landmark, and surrounded by numerous other historic-aged buildings of varying historic register evaluation status. Katie prepared a summary of the area's historical development for inclusion in the technical report.

Mercer West Corridor, WA. *Historian.* For this street improvement project, Katie recorded 57 historic-aged buildings within the project's study area and provided recommendations for their potential National Register eligibility. Her work included field assessments and preparing Historic Property Inventory Forms.

CSO Long Term Control Plan, Seattle, WA. *Historian.* For this programmatic planning document, ESA analyzed multiple proposed alternatives for long-term improvements throughout Seattle's CSO facilities. Alternatives ranged from improvements to existing facilities, construction of new storage facilities, and construction of new conveyance systems. Katie provided a limited literature review and analysis of potential impacts to aboveground cultural resources from the proposed alternatives.

North Creek Interceptor Project, Seattle, WA. *Historian.* This project spanned over three miles along North Creek in Snohomish and King County. Katie researched the area and presented findings by project area segment, discussing the historical context of each segment including several large-scale former dairy farms and recorded archaeological sites.

Paterson Irrigation Project Preliminary Cultural Resources Review, Paterson, WA. *Historian.* Proposed irrigation infrastructure improvements for this project along the north bank of the Columbia River involved analyzing recorded archaeological sites and historic resources across an approximately 3,000 acre project area. Findings were summarized by project alternative in order to evaluate and compare the potential for impacts to known cultural resources.

Wilson-Pacific Elementary and Middle School Literature Review, Seattle, WA. *Historian.* Katie provided a cultural resources literature review for proposed demolition and construction at this North Seattle school. Based on the project location's close proximity to documented historic and archaeological resources, a subsurface cultural resources assessment was recommended prior to ground disturbing activities.

Cedar Park Elementary School, Seattle, WA. *Historian.* Katie provided a brief historical review of this designated Seattle Landmark in North Seattle in anticipation of its proposed reopening. She prepared content for relevant sections of the project's SEPA Environmental Checklist, including evaluating the existing school for its potential inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, Green Lake Elementary School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this Seattle school in anticipation of proposed construction for an addition. She prepared content for relevant sections of the project's SEPA checklist, including evaluating the existing school for its potential eligibility as a Seattle Landmark and inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, Thornton Creek Elementary School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this North Seattle school in anticipation of proposed construction of a new building. She prepared content for relevant sections of the project's SEPA checklist, including evaluating the existing school for its potential eligibility as a Seattle Landmark and potential inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, New Jane Addams K-8 at Pinehurst School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this North Seattle school in anticipation of proposed construction of a new building. She prepared content for relevant sections of the project's SEPA checklist, including evaluating the existing school for its potential eligibility as a Seattle Landmark and potential inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, Arbor Heights Elementary School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this West Seattle school in anticipation of proposed construction of a new building. She prepared content for relevant sections of the project's SEPA checklist, including evaluating the existing school for its potential eligibility as a Seattle Landmark and potential inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, Fairmount Park Elementary School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this West Seattle school in anticipation of its proposed reopening. She prepared content for relevant sections of the project's SEPA checklist.

Seattle Public Schools, Genesee Hill Elementary School Project, Seattle, WA. *Historian*. Katie provided a brief historical review of this West Seattle school in anticipation of its proposed demolition for a new facility. She prepared content for relevant sections of the project's SEPA checklist, including evaluating the existing school for its potential eligibility as a Seattle Landmark and eligibility for inclusion on the National Register of Historic Places or Washington Heritage Register.

Seattle Public Schools, Horace Mann School Project, Seattle, WA. *Historian.* Katie provided a brief historical review of this Seattle school in anticipation of proposed renovation and expansion. She prepared content for relevant sections of the project's SEPA checklist and recommended the school eligible for Seattle Landmarks designation.

Building for Excellence Program IV, Seattle, WA. *Historian.* For this Programmatic Environmental Impact Statement regarding proposed capital improvements to Seattle Public Schools infrastructure, Katie analyzed buildings proposed for improvements to identify their current listing status on local, state, and national historical registers. On a programmatic level, she reviewed proposed alternatives for their potential to adversely affect cultural resources and outlined the process for mitigation measures as required under local, state, and national laws and regulations.

Alaskan Way Viaduct Unanticipated Discovery Emergency Research, Seattle, WA. *Historian.* In response to an unanticipated discovery during construction monitoring at the Washington State Department of Transportation's North Portal Tunnel site, Katie conducted emergency research to identify and date extensive historic features exposed during construction. Research included reviewing documents at the Seattle Public Utilities' Engineering Vault, Seattle Municipal Archives' historic photograph collection, historic maps, and other preexisting studies of the area. Within two days, Katie was able to identify the feature as a retaining wall likely associated with 1902-1912 regrade improvements of Harrison Street and built in front of preexisting residences; other features were considered to be associated with the elevated sidewalks and/or platforms built to provide access to the pre-regrade homes. WSDOT and the Washington State Department of Archaeology and Historic Preservation concurred with her findings and determined the discovery was not significant under the terms of the project's Memorandum of Agreement.

Padden Creek Estuary Enhancement Project, Bellingham, WA. *Historian.* Katie prepared a literature review of proposed habitat restoration work at this estuary located on Harris Bay in Bellingham's historic Fairhaven neighborhood. The literature review identified precontact and historic resources of concern within the project area, including shell midden deposits and remnants of a former lumber mill.

Pump Station 33, Federal Way, WA. *Historian.* Lakehaven Utility District proposed building a new pump station and conveyance near West Hylebos Creek in south King County. Katie prepared a literature review of the proposed project area including conveyance routes and identified the potential for several historic agricultural resources within the proposed project area.

Lower Dosewallips River Restoration Phase IV, Brinnon, WA. *Historian.* Building on earlier phases of restoration work along the Lower Dosewallips River in the town of Brinnon, Katie provided tailored historical research of an additional phase of the restoration project in anticipation of a required federal permit from the US Army Corps of Engineers. Her research guided the survey methodology used for this dynamic river delta on Hood Canal.

Pump Station 3, Redmond, WA. *Historian.* Katie prepared a literature review of a proposed new pump station along the northwest shore of Lake Sammamish at Idylwood Park. The literature review identified historic resources of concern within the project area, however field survey did not encounter any significant artifacts within the project area.

Union Hill Road Improvements Project, Redmond, WA. *Historian.* For this road improvement project near the confluence of Evans and Bear Creek, Katie prepared a literature review of the study area. The project was subject to Washington State Governor's Executive Order 05-05 compliance. She identified precontact and historic resources of concern within the project area, including portions of the 1913 Yellow Brick Road.

Eagle Harbor Beach Main Replacement Project, Bainbridge Island, WA. *Historian.* Katie prepared a preliminary literature review of a proposed sewer main replacement project on this Puget Sound beach near Wing Point on Bainbridge Island. The literature review identified a high potential for cultural resources within portions of the project area and facilitated targeted monitoring of geotechnical work in advance of a full cultural resources survey.

Hollywood Garage Assessment, Woodinville, WA. *Historian.* This project proposed modifying the Hollywood Tavern into a distillery and restaurant. Originally built in 1923 as one of the area's first gas stations, it later operated as a tavern for approximately 70 years. Katie conducted intensive archival research of the property and its role within the former town of Hollywood. She recommended the building as eligible for listing on the National Register of Historic Places and reviewed proposed designs to evaluate the potential for adverse effects to the property.

Kelso Airport Runway Extension, Kelso, WA. *Historian*. ESA provided phased environmental assistance for proposed improvements to the West Side Hangar Development Project for the City of Kelso airport. Katie provided basic project area research and assistance with the recordation and evaluation of multiple existing historic-aged structures within the project area.

Confluence Park Project, Issaquah, WA. *Historian.* This City project proposed converting historic 1880s farmsteads into a 16.5 acre community park along the East Fork Issaquah Creek. Katie prepared archival research of the location's former land use, focusing on the Native American history to supplement a simultaneous study of the property's historic-era land use.

Issaquah Cemetery Transfer Site Improvements Project, Issaquah, WA. *Historian.* This Governor's Executive Order 05-05 project proposed improvements to a historic logging road immediately adjacent to Issaquah's historic pioneer

cemetery. Katie focused her historical research on the cemetery's development

and history of logging in Issaquah. The roadway was recorded as a history property.

Lower Columbia River Submerged Cultural Resources Study, OR and WA. *Historian.* In support of Bonneville Power Administration's on-going Section 106 compliance needs for cultural resources on lands under its management, Katie conducted intensive research of a 150-mile stretch of the Lower Columbia River in order to identify high probability areas for unrecorded submerged cultural resources. Under an accelerated schedule, she visited historical societies and museums to review collections, prepare detailed finding aids of each collection, map high probability areas, and co-author a summary report of findings with recommendations for future work.

15th Avenue NE at 105th Street Bridge Assessment, Seattle, WA. *Historian.* This Seattle Department of Transportation project involved rehabilitating a bridge designed by noted engineer Homer M. Hadley. Katie conducted archival research of the area to supplement bridge-specific design review by other team members. The bridge was recommended as eligible for listing on the National Register of Historic Places.

Marymoor Connector Trail Projects, Redmond, WA. *Historian.* In advance of constructing a trail through this high-probability park at the north end of Lake Sammamish, Katie prepared intensive archival review allowing a tailored survey and construction monitoring plan to reduce costs of subsequent testing and monitoring work.

Ivar's Mukilteo Landing, Emergency Improvements Monitoring Plan, Mukilteo, WA. *Historian*. Damage to the Mukilteo Landing bulkhead from severe storms required emergency repairs, however because the bulkhead is within close proximity to a National Register-eligible Precontact archaeological site, cultural resource review was required. Katie conducted archival research to evaluate the likelihood that the site's deposits extend into the proposed bulkhead repair area. Findings supported the need for cultural resources monitoring during the repairs.

U.S. Customs and Border Patrol, O Street Facility Project, Port Angeles, WA. *Historian.* U.S. Customs and Border Patrol in Port Angeles proposed renovating an existing building. Katie conducted historical research of the proposed location, including evaluating the existing buildings on the parcel.

Hayward Hill Wells Project, Ellensburg, WA. *Historian.* This project proposed installing wells on Hayward Hill, west of Ellensburg. Katie researched the significance of several adjacent cultural resources including the former Kittitas County poor farm, historic irrigation canals, and existing historic reservoir features. Her research also identified anecdotal descriptions of a Native American cemetery within the project boundaries. The results were utilized to develop an inadvertent discovery plan for construction monitoring.

2nd Street / Lincoln Avenue Intersection Improvements, Snohomish, WA. *Historian*. This project was proposed by the City to accommodate the alignment of the Centennial Trail Project through Snohomish County. Katie oversaw the research and recordation of a segment of the historic Seattle, Lake Shore & Eastern Railway remaining within the project area.

Des Moines Marina Improvements Project, Des Moines, WA. *Historian.* This multi-phase City of Des Moines project proposed improvements to the existing marina, located along a portion of Puget Sound shoreline with a high potential for cultural resources. Katie's archival research informed the development of an archaeological monitoring plan carried out during construction.

Interurban Trail and Park Project, Edgewood, WA. *Historian.* Katie conducted simultaneous tailored archival research for the two distinct areas of this project, augmenting preexisting research documents with additional historical maps, land records, and ethnographic information.

6th Street Extension Literature Review, Bellevue, WA. *Historian.* Katie oversaw and contributed to a literature review for proposed transportation improvements in downtown Bellevue. She identified known cultural resources issues in the project vicinity to assist with future design phases.

Hagelstein Well Project, Port Angeles, WA. *Historian.* Clallam County Public Utility District proposed installing drinking water wells east of Port Angeles. Katie conducted research of the project area to identify any previously unrecorded cultural resources. To reduce project costs, she augmented findings from a recent nearby project when preparing the technical report.

Cle Elum Dam Fish Reintroduction Environmental Impact Statement, Kittitas County, WA. *Historian.* Proposed reintroduction of fish into Lake Cle Elum necessitated an Environmental Impact Statement. Katie compiled information on existing cultural resources and historical use of the project's study area for use during impact analysis for archaeological and historical resources.

USS Triton Submarine Memorial Park Assessment, North Richland, WA. *Historian.* This Port of Benton project to develop a public park for displaying the sail of the USS Triton submarine involved several cultural resources issues. Katie's research identified the proposed park was within the former footprint of the 1930s North Richland Construction Camp where thousands of workers and their families lived while building the Hanford Nuclear Reservation. She researched the Camp to evaluate the significance of foundation features still present within the project area. The features were recommended eligible for listing on the National Register of Historic Places. Adverse effects were mitigated through preserving similar features on other Port of Benton properties.

Transload Facility Project, North Richland, WA. *Historian.* For this project, Katie conducted historical research of an area proposed for development of a storage facility by the Port of Benton. Research identified early 1900s irrigation canals, agricultural, and industrial use related to the Hanford Nuclear Reservation occupation during the 1930s.

Port of Friday Harbor, Friday Harbor Airport Assessment, Friday Harbor, WA. *Historian.* This project proposed modifications to the Port of Friday Harbor's airport on San Juan Island. Katie conducted historical research focused on the historic settlements and Native American land use of the project area.

Bellevue Influent Trunk Parallel Assessment, Bellevue, WA. *Historian.* Katie conducted archival research for proposed improvements to a pipeline near Meydenbauer Bay on Lake Washington. Based on Katie's research the area was considered to have a moderate to high probability for Precontact and historic cultural resources.

Lake Forest Park Water District Supply Assessment, Lake Forest Park, WA. *Historian.* Katie provided archival research services for proposed improvements to the Lake Forest Park Water District at the north end of Lake Washington. Research indicated a low probability for precontact and historic cultural resources.

Brightwater Reclaimed Water Pipeline Project, King County, WA. *Historian.* For this pipeline project, Katie provided archival research of the project corridor along the Sammamish River between Redmond and Woodinville. The research identified close proximity to a former county poor farm, historic modifications to the original channel of the Sammamish River, and former Native American and historic-era use of the Sammamish River Valley. One Precontact archaeological site was identified and determined eligible for listing on the National Register of Historic Places. Katie prepared the small collection of soil samples and associated records for curation a local repository.

Dolder Farm Assessment, Carnation, WA. *Historian.* Proposed improvements to this privately-owned farm along the Snoqualmie River were funded by the King County Agricultural and Drainage Assistance Program, which triggered cultural resources review. Katie conducted background research to determine previous archaeological work near the project area and historical use of project vicinity.

Pearce Farm Assessment, Duvall, WA. *Historian.* Proposed improvements to this privately-owned farm along the Snoqualmie River were funded by the King County Agricultural and Drainage Assistance Program, which triggered cultural resources review. Katie conducted background research to determine previous archaeological work near the project area and historical use of project vicinity.

Cedar River Flood Facility Emergency Repair Assessments, King County, WA. *Historian.* Katie conducted accelerated research for proposed emergency repairs at four locations along the Cedar River impacted by severe flooding. In support of Section 106 compliance requirements, Katie conducted cultural resources reviews for each location and presented findings in a single combined report to reduce costs.

Mallard Lake Literature Review, King County, WA. *Historian.* As due diligence, King County requested a cultural resources literature review of proposed conversion of Mallard Lake into a stormwater pond. Katie researched the area to evaluate the potential for cultural resources concerns.

Stuck River Drive Revetment Repair Literature Review, King County, WA. *Historian.* For this floodplain improvement project, Katie conducted research to assess the potential for encountering cultural resources along a 160-acre project area. The assessment was completed for SEPA.

Pautzke Levee Cultural Resources Assessment, King County, WA. *Historian.* As part of a phased cultural resources assessment along the Green River, Katie conducted a literature review of 40-acre proposed floodplain improvement area.

Piner Point / Westlin Cabin Historic Property Documentation, Vashon Island, WA. *Historian.* Prior to demolition by King County to create a shoreline natural area and in support of compliance with Governor's Executive Order 05-05, Katie documented the 1947 Victor B. Westlin Cabin on Vashon Island's Piner Point. Her research included the Westlin family, subsequent occupants, and the architectural origins of the building's vertical log cabin style. She also assisted with field documentation of the cabin and associated outbuildings.

Bass Lake / Ocepek-Wigton Farm Historic Property Documentation, Krain, WA. *Historian.* Katie prepared intensive research and documentation of this 1908 farm in support of proposed demolition by King County to create a natural area and in compliance with Governor's Executive Order 05-05. She focused her research on Austrian immigrants, mining, and agriculture in this region of south King County.

Fenster Levee Assessment, King County, WA. *Historian.* For this Green River levee improvement project, Katie conducted archival research to evaluate the probability for unrecorded cultural resources within the project area. Her efforts focused on the levee's namesake Fenster family to supplement the identification of an archaeological site associated with the family's c.1895 farmstead.

McElhoe Pearson Levee Setback Project, Carnation, WA. *Historian.* For this levee setback project on the Snoqualmie River, Katie conducted archival research to assess the potential for cultural resources in the project area. The project identified and recorded the levee as a historic property.

Lower Newaukum Creek Assessment, King County, WA. *Historian.* Katie prepared archival research for this project, located at the confluence of the Green River and Lower Newaukum Creek. The location was identified as high-probability for unrecorded cultural resources associated with Native American land use. Several culturally modified trees were identified during the survey and recorded as archaeological sites.

Chinook Bend Natural Area Projects, King County, WA. *Historian.* Katie conducted archival review of proposed improvements to this segment of the Snoqualmie River. Her research was utilized for multiple subsequent monitoring projects carried out at the Chinook Bend Natural Area.

Cedar Rapids Levee Assessment, King County, WA. *Historian.* Katie conducted archival review of proposed improvements to this levee on the Cedar River.

Keta Creek Assessment, Auburn, WA. *Historian.* In support of the Muckleshoot Indian Tribe's master planning process, Katie provided archival research of a

property containing a Tribally-owned fish hatchery, natural mineral springs, historic buildings, and documented significant Native American land use. Research included review of archaeological studies, historic memoirs, photographs, and maps, county assessor records, and tribal consultation.

Northeast Longhouses Project, Tacoma, WA. *Historian.* Katie conducted a literature review for proposed construction by the Puyallup Tribe on the northeast shore of Commencement Bay. The project was carried out in support of the Tribe's compliance with Section 106.

452 Lynch Creek Road East Pedestrian Trail Project, Eatonville, WA. *Historian.* This trail project converted an abandoned segment of the Tacoma Eastern Railway into a graveled pedestrian trail; the project was subject to Governor's Executive Order 05-05. Katie was able to save project costs by relying on a recent nearby project which recorded other segments of the same historic railroad.

Bud Blancher Memorial Trail Project, Eatonville, WA. *Historian.* Katie researched this proposed rails-to-trails conversion project encompassing an abandoned segment of the Tacoma Eastern Railway in Eatonville. The project was subject to Section 106 review. Her research resulted in the recordation of the 1903 railroad segment and a 1937 road.

Covington Community Park Project, Covington, WA. *Historian.* For this City of Covington community park development project, Katie conducted a literature review of a 30-acre property to assess the potential for encountering previously unknown cultural resources. The project was subject to compliance with Governor's Executive Order 05-05.

North Twin Bridge Improvement Project, Des Moines, WA. *Historian.* Katie conducted archival research of proposed improvements to this bridge in south King County; the bridge was designed by notable engineer Homer M. Hadley. She worked in tandem with other team members to document the historic bridge according to Washington State Department of Transportation specifications.

Des Moines Creek Park Flood Mitigation Project, Des Moines, WA. *Historian.* Following flood events in Des Moines Creek, ESA conducted a cultural resources survey to identify any impacts to cultural resources or historic buildings within the Des Moines Creek Park. Katie researched this project area and presented findings in a technical report.

Environmental Park Birding Tower, Auburn, WA. *Historian.* This project involved construction of a bird observation tower and environmental park in Auburn. Katie conducted research on the location's former use to identify any unrecorded cultural resources which may be encountered during the project.

Street NW Expansion Project, Auburn, WA. *Historian.* This project proposed expanding a road in Auburn. Katie conducted research on the project's former industrial use and the history, including evaluating an off-site wetland mitigation area. As the project progressed, the City selected additional potential off-site

wetland mitigation areas; Katie conducted supplemental research to document histories of the additional mitigation areas as needed.

Wynoochee-Wishkah Road Realignment Project, Montesano, WA. *Historian.* Proposed realignment and widening of the Wynoochee-Wishkah Road by Grays Harbor County required compliance with Section 106. Katie conducted archival research of areas proposed for impacts.

Brooklyn Road Bridge Replacement Survey, Oakville, WA. *Historian.* Katie prepared archival research for proposed work at the historic Brooklyn Bridge in the Garrard Creek valley. She focused her research on the history of the settlement of the valley and Native American land use.

Bridge Assessment Projects, Grays Harbor County, WA. *Historian.* Katie conducted simultaneous historic research on six bridges throughout the County selected for improvements by the Public Works Department.

Weber Siphon Complex Project, Grant County, WA. *Historian.* Katie conducted research for this US Bureau of Reclamation/Washington State Department of Ecology project in Eastern Washington, located within the Columbia River Basin Irrigation Project. The project area encompassed portions of several historic railroad corridors and historic irrigation features; these resources were recorded as historic properties.

Frenchman Hills Wasteway Project, Grant County, WA. *Historian.* For this US Bureau of Reclamation project located in the Columbia Basin Irrigation Project, Katie researched historic land use, irrigation canals, and agricultural history of the project area to identify any previously unrecorded cultural resources.

McNary and Lower Granite Reservoir Site Fill / Disturbance Mapping, WA. Historian. For the Walla Walla District, US Army Corps of Engineers, Katie led a team of two to review 200+ archival District holdings for information on previous land disturbance activities within the McNary and Lower Granite Dam Reservoirs. Documents reviewed included historic aerial photographs, contract specifications, and construction drawings. Selected documents were digitized and cataloged in an Access database for use by other team members in creating a GIS sensitivity map.

History of Avocational Archaeology Societies on the Columbia River, WA. *Historian.* For this Walla Walla District, US Army Corps of Engineers project, Katie conducted research on multiple avocational archaeology societies active on the Columbia and Snake Rivers during the 1950s-1970s. She reviewed and synthesized a large volume of varied documents including society publications, newspapers, personal papers, journals, photographs, site forms, collections assessments, and archaeological studies. Additional tasks included transcribing interviews, preparing project records for curation, and report preparation.

Chestnut Beach Assessment, Clarkston, WA. *Historian.* In preparation of proposed improvements to this US Army Corps of Engineers-managed Snake River shoreline park in Asotin County, Katie conducted archival research of the

park. She focused on the historic park's Works Progress Administration construction and the potential for Native American use of the project area.

Cable Wake Park Project Literature Review, Redmond, WA. *Historian.* This project was a risk assessment literature review for proposed construction of a 20-acre recreational water park in Redmond's Marymoor Park. Katie prepared archival research focusing on the past agricultural use of the area and evaluating the probability of nearby recorded cultural resources extending into the proposed project area.

Balls O'Fire Short Plat Assessment, Ellensburg, WA. *Historian.* In response to proposed short platting at the confluence of two streams west of Ellensburg, Katie conducted archival research to identify previous land use and unrecorded cultural resources.

Interwest Corporate Headquarters Assessment, Buckley, WA. *Historian.* Katie prepared archival research for proposed development of an area that was subject to SEPA review. She interpreted nearby unrecorded historic properties and Native American land use to evaluate the potential for unrecorded cultural resources within the project area.

Metropolitan Development Council, Parcel Re-zone, Tacoma, WA. *Historian.* For this proposed re-zoning of a parcel in Northeast Tacoma, Katie conducted archival research to identify the history of the parcel, former structures located within the project area, and the potential significance of the former residents.

Nordlund Boat Company, Seawall Project, Tacoma, WA. *Historian.* For this project, located at the mouth of the channelized Hylebos Creek in Tacoma's Commencement Bay, Katie researched the area in order to identify any unrecorded cultural resources that may be impacted by proposed improvements to a seawall.

[Curation/Museum Projects]

Panama Hotel Collections Inventory, Seattle, WA. *Senior Museum Specialist and Project Manager.* Katie led a team of four to inventory the contents of this designated National Treasure in Seattle's Japantown. The basement of this building was used as a repository for the personal belongings of interned Japanese Americans, who were forcibly removed in 1942. The project was funded by a grant from the National Trust for Historic Preservation. Project goals included identifying former owners to support future public outreach. The team cataloged over 7,000 items and identified 83 different individuals. Items were photographed, tagged, and recorded in a database before returning them to their original locations. The database and photographs will be used during future phases of intensive object research and management planning.

Issaquah History Museum Collections Needs and Feasibility Study, Issaquah, WA. *Museum Specialist.* ESA was contracted by Issaquah History Museums to study collections storage needs and propose options to accommodate those needs. Katie served as project manager and individual contributor for sorting and documenting the contents of the Museum's Auto Freight Building, which houses oversized items and those lacking clear provenance. Working alongside staff, Katie sorted objects into categories based on the need to retain or dispose of accessioned and un-accessioned objects and other items that relate to the active use of the facility for repairs to the Museum's vehicle and locomotive collection.

Paul H. Karshner Memorial Museum, Puyallup, WA. *Senior Museum Specialist.* Since 2007 Katie has assisted this school district-operated museum with its Native American Graves Protection and Repatriation Act compliance efforts. After preparing an initial status report, Katie trained volunteers and staff to inventory and catalog collections within PastPerfect Museum software. She renewed consultation efforts and coordinated multiple repatriations. She continues to provide on-going research, consultation, and repatriation assistance. Prior to renovations and rebranding of the facility, Katie led a team of four to de-install exhibits and pack select items for off-site storage; she is also assisting with a phased effort to transfer paper-based museum collections records into PastPerfect.

Museum Inventory and Cataloging Project, Diablo and Newhalem, WA. Senior Museum Specialist. Following closure of Seattle City Light's Glee Davis Museum to the public, Katie led a team of two in inventorying and cataloging the exhibit's 200+ items related to the development of City Light and the Upper Skagit hydroelectric projects. She assigned catalog numbers, photographed, and entered items into PastPerfect museum software. Results were summarized in a technical memo with recommendations for packing and moving the collections.

Glee Davis Museum De-installation and Packing Project, Diablo, WA. Senior *Museum Specialist.* Katie led a team of three to de-install the museum prior to scheduled demolition of the building. She oversaw all aspects of the project including location updates within the PastPerfect museum software, artifact handling, packing methods, moving, and preparation of a technical memo.

Duwamish Gardens Archaeological Collection Curation, Tukwila, WA. Senior Museum Specialist. Archaeological testing for proposed salmon habitat restoration work along the Duwamish River resulted in the identification of additional archaeological materials related to an adjacent National Registereligible Precontact archaeological site (45-KI-703). Katie prepared the collection and associated records for curation at a local repository.

Tollgate Farm Archaeological Collection Curation, North Bend, WA. Senior Museum Specialist. Testing at this site was carried out to delineate boundaries of the historic Tollgate Farm site (45-KI-455) and evaluate proposed impacts to the site by park development. Katie prepared the small archaeological collection and associated records generated during testing for curation at a local repository.

Draft Statewide Curation Policy, WA. *Senior Museum Specialist.* At the request of the Washington State Department of Transportation, Katie co-authored a draft policy to guide WSDOT's management of archaeological collections generated during construction projects. She also prepared a summary report and draft

procedures for the agency to consider following when preparing collections for curation at facilities without published procedures.

Terracotta Warriors of the First Emperor **Condition Monitoring, Pacific Science Center, WA.** *Senior Museum Specialist.* Katie served as project manager and individual contributor for three contracts related to this traveling exhibit of worldfamous Qin Dynasty (2,200 years ago) artifacts. She oversaw and conducted registrar services for the installation and deinstallation. This required artifact handling, documentation, and monitoring during the duration of the exhibit.

The International Exhibition of Sherlock Holmes **Condition Monitoring, Pacific Science Center, WA.** *Senior Museum Specialist.* Katie prepared incoming and outgoing condition assessments for original objects on display as part of this exhibit. Work included monthly on-site condition monitoring of select objects. Items ranged included first editions, manuscript pages, illustrations, medical specimens, and newspapers. She performed object stabilization and adjusted mounts as needed.

The Art of the Brick Condition Monitoring, Pacific Science Center, WA. Senior *Museum Specialist*. For this three-month exhibit, Katie oversaw object monitoring services for over 100 art pieces constructed of LEGOs.

Pompeii: The Exhibition Condition Monitoring, Pacific Science Center, WA. Senior Museum Specialist. For this four-month exhibit, Katie provided artifact monitoring services twice a month for a wide assortment of archaeological items from the 79 AD archaeological site of Pompeii while on display. Items included mosaics, frescoes, and items of metal, stone, and glass.

Spy: The Secret World of Espionage **Exhibit Condition Monitoring, Pacific Science Center, WA.** *Senior Museum Specialist*. For this six-month exhibit, Katie provided monthly artifact monitoring services for a diverse range of items on display including electronic devices, paper-based records, and textiles.

Tutankhamun: The Golden King and the Great Pharaohs Exhibit Condition Monitoring and Cleaning, Pacific Science Center, WA. *Senior Museum Specialist.* For this exhibit of Egyptian archaeological items, Katie provided artifact monitoring and cleaning services over an eight-month period for statuary items displayed in open air.

Harry Potter: The Exhibition Exhibit Condition Monitoring and Cleaning, Pacific Science Center, WA. *Senior Museum Specialist*. Katie conducted monthly on-site condition monitoring of artifacts on display from the Harry Potter movie series. She performed selective cleaning of artifacts, including the animatronic hippogriff Buckbeak.

Star Wars: Where Science Meets Imagination Monitoring, Pacific Science **Center, WA.** *Senior Museum Specialist.* For this exhibit of Star Wars movie series artifacts, Katie provided monthly on-site condition monitoring, prepared monthly reports, and assessed object condition upon installation and de-installation of the exhibition. **Museum Facility Assessment, Vashon, WA.** *Senior Museum Specialist*. In support of this grant-funded project, Katie conducted a facility assessment of the Vashon-Maury Island Heritage Association that focused on reviewing existing environmental and collections storage conditions. She prepared a report for the organization outlining recommended priorities for improvements. The VMIHA used this report to secure subsequent grant funding for phased improvements.

King Street Station Archaeological Collection Curation, Seattle, WA. *Senior Museum Specialist.* ESA Paragon provided archaeological monitoring of this complex multi-phase construction project to rehabilitate a 1906 train station in downtown Seattle. Katie managed the resulting archaeological items collected during the project and coordinated the artifact analysis. She prepared the collection and associated records for curation at a local repository.

Duwamish River Bend Archaeological Collection Curation, Tukwila, WA. Senior Museum Specialist. During construction of Sound Transit's Central Link Light Rail to SeaTac International Airport a precontact archaeological site was identified within the project boundaries; the site was mitigated with data recovery. In tandem with other ESA Paragon staff, Katie oversaw and managed the collection of archaeological material generated during data recovery and prepared it for curation at a local repository.

Archaeological Collections Inventory, Cataloging, and Exhibit Development Project, Anacortes, WA. Senior Museum Specialist. For this Institute of Museum and Library Services grant-funded project, Katie worked with Samish Indian Nation staff to inventory, rehabilitate, catalog, and prepare an exhibit of Triballyowned and administered archaeological collections. She managed a supporting staff of one museum technician throughout the project and coordinated the schedule and budget.

Cedar River Watershed Educational Center Miscellaneous Curation Tasks, North Bend, WA. *Senior Museum Specialist.* Katie provided general curation assistance to complete unfinished tasks for an archaeological collection managed by Seattle Public Utilities and housed at the Cedar River Watershed Educational Center repository.

Slater Museum Native American Graves Protection and Repatriation Act Assistance, Tacoma, WA. *Senior Museum Specialist.* Katie provided NAGPRA research services for five cases involving human remains including two culturally unidentifiable individuals. She provided client advice, prepared draft letters initiating consultation, and drafted notices for submission to National NAGPRA and publication within the *Federal Register*.

Archaeological Collections Research, Snohomish County, WA. Senior Museum Specialist. Katie assisted with additional research to locate missing portions of an archaeological collection generated in the 1970s. She was able to relocate these items and facilitate their transfer to a local repository for curation.

Preliminary Archaeological Collection Preparation, Carnation, WA. Senior Museum Specialist. Katie supervised all aspects of work by a supporting museum technician to prepare the archaeological collection from 45-KI-724 for curation at the designated local repository. She provided quality assurance for inventories, cataloging, and preparation of the associated archival records.

Eagles Landing Hotel Basketry Exhibit, Chehalis, WA. *Senior Museum Specialist.* Katie assisted staff of the Confederated Tribes of the Chehalis Reservation with preparing condition reports and installing 12 Tribally-owned baskets selected for exhibit within the hotel lobby. Additional tasks included creating custom mounts and writing exhibit labels.

Native American Graves Protection and Repatriation Act Recommendations Project, WA. Senior Museum Specialist. Katie led a team of two in conducting intensive research on 69 archaeological museum collections under the jurisdiction of the Walla Walla District of the US Army Corps of Engineers. The project featured a complex task breakdown and was on an accelerated deliverable schedule. Katie worked closely with District archives, published ethnographies, and archaeological reports to prepare over 300 pages of analysis to assist the District with its repatriation efforts.

Status Report for Native American Graves Protection and Repatriation Act Compliance Project, WA. *Senior Museum Specialist.* For the Walla Walla District of the US Army Corps of Engineers, Katie conducted an intensive literature review to determine the NAGPRA status of existing archaeological collections from over 1,000 sites managed by the District. Documents reviewed included museum collections assessments, archaeological survey reports, archaeological site forms, Washington State Department of Archaeology and Historic Preservation records, University of Idaho Laboratory of Anthropology library holdings, and holdings at the University of Washington Libraries. Additional tasks included preparing associated project records for curation.

Relevant Experience Prior to Joining ESA

Historic Properties Inventory, Grant County, WA. *Archaeological Field Technician.* This Grant County Public Utilities District project was required by the Federal Energy Regulatory Commission in order for the District to renew its operation of the Priest Rapids and Wanapum Dams on the Columbia River. Over a six month period Katie conducted field survey, testing, GPS mapping, and site recordation within the dam's two reservoirs.

Employment History

2012 - Present

Historian/Sr. Museum Specialist, Environmental Science Associates, Seattle.

2004 - 2012

Sr. Researcher/Sr. Museum Specialist, Paragon Research Associates, LLC, Seattle.

2007

Project Manager, Online Collections Database Project, Archaeology Department, Burke Museum of Natural History and Culture, Seattle.

2007

Native American Graves Protection and Repatriation Act (NAGPRA) Assistant, Archaeology Department, Burke Museum of Natural History and Culture, Seattle.

2006

Native American Graves Protection and Repatriation Act (NAGPRA) Assistant, Registration Department, Burke Museum of Natural History and Culture, Seattle.

2005 - 2006

Collections Intern, Museum of History and Industry, Seattle.

2005

Project Manager, Departmental Library Database Project, Museology Graduate Program, University of Washington, Seattle.

2004 - 2006

Native American Graves Protection and Repatriation Act (NAGPRA) Assistant, Archaeology Department, Burke Museum of Natural History and Culture, Seattle.

2003

Archaeological Field Technician, Western Shore Heritage Services, Inc., Bainbridge Island, WA.

2002 - 2003

Archaeological Field Technician, Earth Imaging Associates, Inc., Ellensburg, WA.

Education

2006

M.A., Museology, University of Washington, Seattle.

2002

Archaeological Field School at the Saddle Mountains, WA, Central Washington University, Ellensburg.

2002

B.A., with distinction, Art History, University of Washington, Seattle.