BEFORE THE HEARING EXAMINER CITY OF SEATTLE

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In the Matter of the Appeal of:

Hearing Examiner File: MUP-12-016(W)

BRUCE STRUTHERS

from a SEPA decision issued by the Director, Department of Planning and Development RESPONDENTS' PRELIMINARY WITNESS AND EXHIBIT LIST

Respondents reserve the right to call and introduce the following witnesses and exhibits:

A. WITNESSES

1. Greg Stevens, P.E. SPU

Mr. Stevens is the project manager for the Meadowbrook Pond Detention Facility Dredging and Improvements Project ("Project"). He will testify regarding the background of, need for, and design of the Project, the environmental review and permitting process for the Project, the Project's relationship to other SPU projects, and any other issues raised by Appellant regarding the Project.

> 2. Lucas DeHerrera DPD

Mr. DeHerrera is a Senior Land Use Planner at DPD and was the lead planner for the DPD decision that is the subject of this appeal. He will testify regarding the DPD review process and any other issues raised by Appellant regarding DPD's decision.

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RESPONDENTS' PRELIMINARY WITNESS AND EXHIBIT LIST - 1 Peter S. Holmes Seattle City Attorney 600 Fourth Avenue, 4th Floor P.O. Box 94769 Seattle, WA 98124-4769 (206) 684-8200

David Jacobs, Jr., P.E. SPU (Statement of qualifications attached)

Mr. Jacobs will provide expert testimony regarding results of modeling related to stormwater flows in the context of Meadowbrook Pond and related natural and manmade systems and the Project, the functioning of Meadowbrook Pond and related systems and the Project, and any other issues raised by Appellant regarding the Project. With respect to effects on stormwater flows resulting from the expansion of the Pond, Mr. Jacobs' testimony is expected to track the discussion in the SEPA checklist for the Project. With respect to Appellant's claim regarding hydraulic changes allegedly resulting from the proposed work at the inlet to the high flow bypass, Mr. Jacobs is expected to testify that he would not anticipate that the change to the inlet (in its "clean" state) resulting from the proposed work would result in any difference in the volume of flows through the bypass.

> 4. Mike (Rocky) E. Hrachovec, P.E., CESCL Natural Systems Design (Statement of qualifications attached)

Mr. Hrachovec is the lead designer for the Project. He will provide both factual and expert testimony regarding the background of, need for, and design of the Project; the functioning of Meadowbrook Pond and related natural and manmade systems; the purpose, operation and effect of the Project from the standpoint of stormwater quantity and quality; the flood control benefits of the Project; and any other issues raised by Appellant regarding the Project. With respect to Appellant's claim regarding hydraulic changes allegedly resulting from the proposed work at the inlet to the high flow bypass, Mr. Hrachovec is expected to testify that the work is not designed to increase flows through the bypass, but rather to facilitate improved maintenance (particularly during storm events) so that the inlet works as already intended.

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5. Kurt Fickeisen, Registered Consulting Arborist and Certified Arborist Symbiosis Tree Care (Statement of qualifications attached)

Mr. Fickeisen prepared the tree report for the Project. Appellant appears to intend to raise issues regarding trees, though the exact nature of those issues is unclear at this point. Mr. Fickeisen will provide expert testimony in response to tree issues raised by Appellant.

6. Any witnesses listed by Appellant.

7. Any rebuttal witnesses.

RESPONDENTS' PRELIMINARY WITNESS AND EXHIBIT LIST - 2

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| 1 | В. | EXHIBITS | | | | |
|----------|--|----------|--|--|--|--|
| 2 | | 1. | Seattle Public Utilities SEPA Environmental Checklist for Pond Detention Facility Dredging and Improvements February 29, 2012. | | | |
| 4 | | 2. | DNS for Meadowbrook Pond Detention Facility Improvements Project, dated March 8, 2012. | Dredging and | | |
| 5 | | 3. | Letter from Sue Tanner to Bruce Struthers dated April 3 appeal of DNS). | , 2012 (rejecting | | |
| 7 | | 4. | SEPA closeout memo, Betty Meyer, SPU, April 12, 2012 | · · | | |
| 8 | | 5. | Exemption from City of Seattle Environmentally Provisions for the Meadowbrook Pond Detention Facili Improvements Project, dated April 2, 2012. | Critical Areas ty Dredging and | | |
| 10 | | 6. | Plan Set, Meadowbrook Pond Dredging and Improve pages). | ements 2012 (30 | | |
| 11 | | 7. | Notice sign mockup, 2 maps, confirmation of sign. | | | |
| 12 13 | | 8. | City of Seattle Analysis and Substantive Conditioning of Planning and Development, DPD Project No. 3013236 2012. | of the Director of , dated June 14, | | |
| 14 | | 9. | Notices of application and decision from Land Use Inform | mation Bulletin. | | |
| 15 16 | | 10. | HWA GeoSciences, Inc. June 23, 2003. Sed Meadowbrook Pond Seattle, Washington. HWA Job No. | iment Sampling 2003-040-22. | | |
| 17 | | 11. | Resource Planning Associates, Miramar Group, and T August 12, 2005. Meadowbrook Pond: A study of wat | er circulation and | | |
| 18 | | | its possible effects on stormwater treatment and water qu | ality. | | |
| 19 | | 12. | Horner, Richard and Taylor Associates. October, 2008. Meadowbrook Pond: Assessment of maintenance and performance and proposed action | | | |
| 20 | | | plan. | | | |
| 21 | | 13. | Booth, Derek. 2008. Meadowbrook Pond concept sediment-related issues. Technical memorandum. | ual analysis for | | |
| 22 | | 14. | Eastberg, Cheryl (City of Seattle Department of Parks and Recreation No date. Checklist of Meadowbrook Pond bird species. | | | |
| 23 | | | | | | |
| | RESPONDENTS' PRELIMINARY WITNESSPeter S. Holm Seattle City Attorn 600 Fourth Avenu P.O. Box 94769 | | | | | |

Floor P.O. Box 94769 Seattle, WA 98124-4769 (206) 684-8200

| 15. | Northwest Archaeological Associates (NWAA). May 2011. Cultural resources assessment for the Thornton Creek Confluence Project, King County, Washington. |
|--------------------------------------|---|
| 16. | Seattle Public Utilities. 2010. Seattle Biological Evaluation. |
| 17. | Exceptional Trees and Thornton Creek Confluence, Symbiosis Tree Care, October 31, 2011. |
| 18. | Cover letter and two reports: Trees near South Thornton Creek and Trees near North Thornton Creek, Symbiosis Tree Care, July 15, 2011. |
| 19. | NHC Inc., <i>Flood Insurance</i> Study <i>for Thornton Creek and its Tributaries</i> , January 2010 (and associated HSPF/HEC-RAS model). |
| 20. | NHC Inc., Draft Memo 1: Kramer Creek HSPF Modeling and Calibration and XP-SWMM update, April 23, 2006 (and associated HSPF/XP-SWMM model). |
| 21. | NHC Inc., Draft Memo 2: Thornton Basin Model Updates and Calibration, April 23, 2006 (and associated HSPF/XP-SWMM model). |
| 22. | Jacobs, Dave (SPU Separated Systems Modeling and Monitoring Lead). December 13, 2011. Results of modeling for Meadowbrook Pond expansion. Email to Greg Stevens (SPU Project Manager) with attached spreadsheet. |
| 23. | Natural Systems Design. June 2011. Basis of Design, Thornton Creek Confluence Project. |
| 24. | Chapin, David. June 2011. Thornton Creek Confluence Project Jurisdictional Wetland Identification and Delineation report. Seattle Public Utilities. |
| 25. | Aspect Consulting. June 2011. Thornton Confluence geotechnical report. |
| 26. | SPU Materials Laboratory. January 2010. Geotechnical data report, 35 th Avenue Northeast culvert replacement. |
| 27. | City of Seattle, State of the Waters 2007 report. |
| 28. | Meadowbrook Pond: A Stormwater Detention and Flood-Control Facility (SPU Publication). |
| RESPONDENTS' PRI AND EXHIBIT LIST | ELIMINARY WITNESS - 4 Peter S. Holmes Seattle City Attorney 600 Fourth Avenue, 4th F |

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| 1 | 29. | Any exhibits li | isted by | y Appellant. | | | | |
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| 2 | 30. | | | | | | | |
| 3 | 31. | Any rebuttal e | xhibits | • | | | | |
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| 5 | Respectfully submitted this 1st day of August, 2012. | | | | | | | |
| 6 | | | | PETER S. HOLMES Seattle City Attorney | | | | |
| 7 | | | | | | | | |
| 8 | | | By: | s/Jeffrey S. Weber, WSBA #24496 Assistant City Attorney | | | | |
| 9 | | | | Attorneys for Respondents Seattle Public Utilities & Departm | ent of | | | |
| 10 | | | | Planning & Development | | | | |
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| | RESPONDENTS' PF AND EXHIBIT LIST | | ITNESS | 5 | Peter S. Holmes Seattle City Attorney 600 Fourth Avenue, 4th Floor P.O. Box 94769 Seattle, WA 98124-4769 (206) 684-8200 | | | |

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| 1 | CERTIFICATE OF SERVICE | | | | | | | |
|--------|--|--|--|--|--|--|--|--|
| 2 | I certify that on this date, I electronically filed a copy of Respondents' Preliminary | | | | | | | |
| 3 | Witness and Exhibit List with the Seattle Hearing Examiner using its e-filing system. | | | | | | | |
| 4 | I also certify that on this date, a copy of the same document was sent to the following | | | | | | | |
| 5 | party listed below in the manner indicated: | | | | | | | |
| 6 7 | R. Bruce Struthers(X) U.S. First Class Mail, postage prepaid10514 Riviera Place NE(X) Email: bruce.struthers@comcast.net Seattle, WA 98125Appellant | | | | | | | |
| 8 | the foregoing being the last known address of the above-named party. | | | | | | | |
| 9 | Dated this 1st day of August, 2012, at Seattle, Washington. | | | | | | | |
| 10 | D. O. M. | | | | | | | |
| 11 | Rosie Lee Hailey Rosie Lee Hailey | | | | | | | |
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| | RESPONDENTS' PRELIMINARY WITNESS AND EXHIBIT LIST - 6 Peter S. Holmes Seattle City Attorney 600 Fourth Avenue, 4th Floor P.O. Box 94769 Seattle, WA 98124-4769 (206) 684-8200 | | | | | | | |

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David Jacobs Jr., PE

Contact Information

City of Seattle 700 Fifth Avenue, Suite 4900 PO Box 34018 Seattle, WA 98124 (206) 684-3995 Dave.jacobs@seattle.gov

Registration

Professional Engineer State of Washington

Education

BS Civil Engineering Specialization in Environmental Engineering Seattle University 2002

MS Civil Engineering Specialization in Environmental Engineering University of Washington 2005

Professional History

Seattle Public Utilities May 2011 – Present Sr. Civil Engineer

Rosewater/GHD April 2008 – May 2011 Project Engineer

KPFF Consulting Engineers July 2005- February 2007 Project Manager/Engineer

> Black and Veatch Sept. 2002 – Sept 2003 Staff Engineer

Seattle Public Utilities, Dam Safety Department March 2000 – June 2000 Internship

Seattle Public Utilities, Material Laboratory June 1999 to March 2000 Internship

Summary of Qualifications

- Masters in Civil Engineering with a Specialization in Environmental Engineering from the University of Washington: with a focus on basin wide integrated water management planning.
- Hydraulic modeling experience with XP-SWMM, InfoWorks, HEC-RAS and PCSWMM/EPASWMM5
- Sincere commitment for implementing low impact design alternatives on all projects through a collaborative design process
- Experienced design engineer
- Working knowledge of Microsofts business and personal productivity applications, AutoCAD, PCSWMM, InfoWorks, KCRTS hydrologic model, and ArcView GIS

Recent Representative Projects

- Seattle Public Utilities, 14th and Concord CSS system improvements; flow monitoring data analysis (7 meters), model development/calibration/validation, problem identification (model platform: EPA SWMM5), and options analysis. May 2011-Present
- Seattle Public Utilities, 22nd and Jefferson CSS and Drainage investigation: flow monitoring data analysis (5 meters), model validation (model platform: EPA SWMM5), and options analysis. May 2011-Present
- Seattle Public Utilities, Broadview Long Term Basin Planning; flow monitoring data analysis (20 meters), model development/calibration/validation (model platform: EPA SWMM5), problem identification, and options analysis. May 2011-Present
- Seattle Public Utilities, Broadview Backflow Preventer Pilot Program; flow monitoring data analysis (7 meters), model development/calibration/validation, (model platform: EPA SWMM5) problem identification, and options analysis. May 2011-November 2011
- Seattle Public Utilities, Puget Creek Culvert Replacement: Model development/validation/problem identification (model platform: EPA SWMM5), and options analysis July 2011 – Present
- Seattle Public Utilities, Meadowbrook Pond Expansion; Options analysis (model platform: XP-SWMM). December 2011
- Seattle Public Utilities, AWVSRP CSO Design Alternatives; existing model validation (model platform: InfoWorks), option analysis. April 2010 to May 2011
- Seattle Public Utilities, CSO Long Term Control Plan, Flow monitoring data analysis (63 meters), model development/calibration/validation (model platform: EPA SWMM5),, and options analysis. September 2008 to April 2010
- Seattle Public Utilities On-Call Assignment 18, CSO Observations, Seattle, Washington. September 2008 to February 2011

Michael (Rocky) E. Hrachovec, P.E., CESCL

Natural Systems Design, Seattle, WA

Years of Experience

Expertise

- Stream Restoration Engineering
- Urban stream systems
- Design of in-stream wood
- Design plans and specifications
- Hydraulic analysis
- Slope stability bioengineering
- Sediment and erosion control
- Construction supervision
- Cost estimating

Education

M.S. Civil Engineering, University of Washington, 1997

B.S. Civil Engineering, University of Wyoming, 1993

Training

Rosgen Level III, River Assessment and Monitoring, 2012

Rosgen Level II, River Morphology and Applications, 2012

Rosgen Level I, Fluvial Geomorphology for Engineers, 2007

Registrations

Registered Professional Engineer, WA, #36039, 1999-present

Key Qualifications

As Principal Engineer for Natural Systems Design, Rocky specializes in the design and construction supervision of stream and wetland restoration projects. In the past nine years, Rocky has designed and managed the placement of over 2,000 logs within a total of 32,000 feet of restored urban streams. In these enhancement projects, he has used wood in commercial and residential areas for habitat enhancement, channel stabilization to protect utilities and property, and improved fish passage.

5516 Roosevelt Way NE, Seattle, WA 98105, 206-834-0175, Rocky@NaturalDes.com

He is currently the principal engineer in the design of three stream and floodplain restoration projects for Seattle Public Utilities and Kitsap County that will restore a total of 1.2 miles of urban stream requiring the installation of nearly 1,300 logs for habitat restoration and bank stabilization.

Taking projects from initial concept to bid-ready plans and specifications, Rocky has overseen the development of design packages for nearly 60 natural resource projects, with individual constructed values up to \$5 million that included floodplain creation, channel realignment, habitat enhancement, fish passage barrier removal, bank stabilization and culvert replacement.

Rocky has taught for the University of Washington as a specialty lecturer for nine years on the topics of engineering ethics, erosion and sediment control. For the last two years he has taught restoration engineering design for the University's Stream Restoration Certificate Program. He has been the stamping engineer for stream restoration

projects throughout the Puget Sound Region.

Project Engineer and Manager, Thornton Creek Confluence Restoration, Seattle Public Utilities, Seattle, WA For the past two years, Rocky has led a five-firm team through the preliminary engineering and detailed design of the restoration of the confluence of the north and south branches of Thornton Creek, located in North Seattle on the most productive salmonid habitat in the City. The project site is surrounded by residential properties, municipal facilities and roadways, has multiple utilities crossing through the site including sewer mains, stormwater mains, gas and water and is located in a low-gradient area that was formerly wetland. The nearly 6-acre project consists of expanding a 3-acre stormwater management facility, re-constructing over 1,000 ft of channel and installing a new 30-ft span culvert under an arterial roadway. Over 160 logs are slated for installation within the channel and must create spawning and rearing habitat for chinook and coho salmon as well as resident cutthroat trout and peamouth, while also allowing large amounts of incoming sediment and debris to transport through the system and relieve localized flooding. The pond expansion will be completed in 2012 and the stream will be restored in 2013 at a combined cost of approximately \$5 million.

Project Engineer and Manager, NE 105th Culvert Replacement, Seattle Public Utilities, Seattle, WA

Failing twin 42" culverts risked loss of a roadway and isolation of 6 private homeowners on a cul-de-sac. Rocky's initial site evaluation recommended emergency stabilization of the road fill and a headcut at the culvert outlets. The detailed design called for installation of an 18-ft wide culvert, channel floodplain creation and stabilization of 300 ft of banks and streambed to stabilize two sewer lines under the creek and a stabilize fill under a neighboring private residence. Negotiations with state and federal regulators and the Muckleshoot Tribe called for the installation of over 70 pieces of large wood within the site and in the deeply-incised downstream channel for 600 ft. Due to site constraints, 2/3 of the large wood was installed using hand methods. Rocky and his team provided daily construction supervision of the in-stream elements. The project has successfully absorbed two seasons of high flow events and has been hailed as a model project by neighbors, the City and state agencies due to its timely

completion within tight schedule and budget constraints, its high habitat value and aesthetics. The large wood structures have re-engaged formerly abandoned floodplain areas, retained incoming gravels and diversified the monotypic clay bed into a diverse pool-riffle morphology.

Project Engineer and Manager, West Hylebos Creek Salmon Habitat Restoration, Friends of The Hylebos, Federal Way, WA

Rocky led the design and construction supervision of a design-build project to re-align 900 ft of West Hylebos Creek to restore abandoned agricultural lands into a 3-acre stream and wetland complex through the installation of over 260 pieces of large woody material and installation of over 12,000 native plants. The high sand loading is transported through the site due to the wood structure design which keeps open patches of spawning gravel, while relieving local roadway flooding.

Project Engineer and Manager, Newport Creek Stabilization, City of Bellevue Department of Utilities Engineering, Bellevue, WA

The City of Bellevue required stabilization of 1,500 ft of channel bed and banks to reduce sediment input to Lake Washington and comply with a negotiated settlement with downstream landowners. Installation of over 500 pieces of large wood to create bed and bank stabilization structures was selected as the preferred alternative. However, delicate soils and extensive wetlands through the site prohibited the use of machine installation techniques. Rocky's team partnered with a local non-profit environmental group to develop a design-build approach to deliver and install all the wood using hand methods and field-directing the installation of the wood and bioengineered bank stabilization sites. Five drop sites were selected around the project perimeter and skylines were installed to hoist the materials down into the valley bottom, with individual cable runs of over 300 ft. Hand crews carried the logs to the individual sites and installed all materials using hand methods within 9 months of project initiation. Following a 100-yr storm 2 weeks after 90% completion, minor repairs were performed and the structures and channel have remained stable for the following five years.

Project Engineer and Manager, Coal Creek Bank Stabilization, City of Bellevue Department of Utilities Engineering, Bellevue, WA

To reduce sediment input to Lake Washington, the City of Bellevue required stabilization of channel banks along 4,000 feet of channel through barely-consolidated coal tailings. Using a mix of design-build and design-bid-build techniques, Rocky and his team developed designs, obtained permits and supervised installation of over 460 pieces of large wood at 26 discrete sites over 3 construction seasons. To access the sites, logs were delivered using skylines, low-impact heavy equipment and traditional equipment while avoiding impacts to high-pressure water lines, storm sewers and sewer lines throughout the project area.

Project Engineer and Manager, Clark Lake Pond - City of Kent Engineering, Kent, WA (2009)

Design manager to transform 10 acres of abandoned farmland into diverse habitat incorporating a 1.4 acre stormwater treatment pond, 4.1 acres of wetland and buffers, and 500 ft of stream enhancement. Project design included hydraulic analysis, grading design to dispose of over 30,000 cy of cut on-site, development of wetland mitigation plan and design, landscape and trail design. Stream constructed in 2009, remainder of project to be constructed based on availability of funds.

Project Engineer and Manager, Garrison Creek Flood Control - City of Kent Engineering, Kent, WA (2005)

Evaluated surface water hydraulics over a 20 acre site to relieve flooding of SR 167 off-ramp. Managed design, permitting and construction on 2,000 ft of channel and 1.5 acres of surface drainage. Stabilized channel incision, restored floodplain function and resolved two fish passage barriers using 200 logs, channel and floodplain regrading and multiple bioengineering techniques.

Publications

Johnson, A and Hrachovec, M. 2006. The Use of Large Woody Material in Stream Enhancement Projects Within the City of Redmond, WA. White paper to City of Redmond.

Hrachovec, M., A. Johnson, G. Giraldo, D. Shearer, B. Belby, G. Fowler, T. Abbe and D. McCormack, 2011. Thornton Confluence Preliminary Engineering Report. White paper to Seattle Public Utilities, City of Seattle.

Hrachovec, M and A. Johnson. 2009. Glendale Creek Sediment Evaluation, White paper, Island Co Public Works

Silverman, N., A. Johnson, K. Andrews and M. Hrachovec . 2010. Littlebrook Creek Restoration Assessment. White paper for Friends of Littlebrook Creek

Fischer, M and Hrachovec, M, 2010. Damage Assessment, Wetland and Site Restoration Plan for 3206 West Valley Highway, Sumner WA. White Paper to Private Client

Minton, Gary. 2002. Stormwater Treatment, Biological, Chemical and Engineering Principles, 300 pgs. Stormwater Treatment. M. Hrachovec acted as reviewer of engineering principles.

Hrachovec, M, 2001. <u>Tacoma Combines Public Involvement and Stormwater Pollution Control</u>. Public Works, vol. 132, no. 12: pp. 68-70.

Hrachovec, M. 2001. <u>A Grate Step Toward Public Involvement</u>. Stormwater, vol. 2, no. 1: pp. 74-75.



Symbiosis Tree Care 13024 37th Ave. NE Seattle, WA 98125 Telephone: 206.841.3158 Email: <u>kurtfick@gmail.com</u>

Kurt Fickeisen

Owner, Symbiosis Tree Care

Certifications:

- Registered Consulting Arborist© #472 (ASCA)
- Tree Risk Assessor Certification # 264 (PNW- ISA)
- Certified Arborist # RM-451A (ISA)

Professional Affiliations:

- American Society of Consulting Arborists (ASCA)
- International Society of Arboriculture (ISA)
- Pacific Northwest Chapter International Society of Arboriculture (PNW-ISA)
- Plant Amnesty

Current Professional Activities

- April 2011, Hired by Beaux Arts Village WA as their municipal arborist
- September 2010, Organized the 2010 Pacific Northwest Chapter of the ISA (PNW-ISA) Tree Climbing Competition
- April 2009, Fulfilled requirements and earned the title or Registered Consulting Arborist from the ASCA
- June 2008, Consulting Academy Graduate ASCA
- June 2008, Organizing Annual Donated Tree Care for Plant Amnesty at the Good Sheppard Center, Seattle, Washington

Previous Professional Activities

- May 2008, Named Co Chairman of the Plant Amnesty Tree Program Committee
- 2004, became Member of the Seattle Heritage Tree Committee
- 1999, Organized the 1999 PNW-ISA Tree Climbing Competition
- 1996-97 Foreman of a community tree care contract in Fort Lewis Washington

Education and Background

- 1988, First work in Arboriculture (employee of City Foresters, Seattle, WA)
- 1989, Graduated, University of Idaho (degree of Bachelor of Science, Mathematics: Applied)
- 1993, Arboriculture work in Colorado (employee of Boulder Tree and Landscape, Boulder, CO)
- 1994, Graduated Arborist Certification from the ISA
- 1995, Arboriculture work (returned to work at City Foresters, Seattle, WA)
- 1998, Founded Symbiosis Tree Care
- 2007, Tree Risk Assessment: graduate PNW ISA
- 2008, Graduated Consulting Academy from ASCA