

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

IN THE MATTER OF )

Docket No. CWA-02-2011-3601

Dependable Towing & Recovery, Inc. )  
and David A. Whitehill, )

Respondents. )

U.S. ENVIRONMENTAL  
PROTECTION AGENCY-REG.II  
2011 DEC 15 P 12:28  
REGIONAL HEARING  
CLERK

RESPONDENTS' INITIAL PREHEARING EXCHANGE

Pursuant to an Order of Judge Barbara A. Gunning, dated October 5, 2011, the Respondents, Dependable Towing & Recovery, Inc. and David A. Whitehill, respectfully submit their Initial Prehearing Exchange:

- I. The names of any expert or other witnesses they intend to call at the hearing, together with a brief narrative summary of each witness' expected testimony, or a statement that no witnesses will be called.

Respondents intend to call the following experts or witnesses at the hearing:

- Ray Kagel, Jr., M.S.  
Kagel Environmental, LLC  
3879 E. 200 N.  
Rigby, Idaho 83442

Mr. Kagel will testify about his investigation of Respondents' property, and about the extent and quality of the wetland fill. He will testify about the potential damage that may be caused by removal of the old fill. He will testify about his review of the materials submitted by the Complainant, including the exhibits identified in Complainant's Prehearing Exchange.

In particular, Mr. Kagel will testify as to the following points:

a. Areas of alleged wetland violation are mostly leveled, graded, smooth surfaced, and stabilized in place. Forested wetlands appear to immediately abut most of the stabilized fill that has been in place for at least several years. Consequently, it would be impossible to mechanically remove large areas of fill without significant disturbances to heretofore untouched adjacent wetlands.

b. Extant fill material is by definition a pollutant, therefore the excavation, loading, transportation, dumping and re-depositing of this material will result in additional environmental disturbances to existing wetlands by exposing underlying soils and hydrology to additional compaction from heavy mechanized construction equipment.

c. Excavating extant fill cannot be accomplished without significant digging, scratching, scraping, and leveling, and other major physical disturbances to the native wetland ground surfaces. Such extreme earth moving work will expose underlying wetland soil surfaces to substantial adverse impacts such as petroleum leaks from motorized equipment and increases in surface runoff, erosion, and turbidity of freshly exposed soils and surface hydrology.

d. The excavation, removal, loading, transportation, and unloading of thousands of yards of this pollutant (fill material) cannot be accomplished without de minimus and other incidental fall back of pollutants into both wetlands and ecologically valuable uplands despite the incorporation of standard Best Management Practices ("BMPs").

e. Transporting huge truck loads of excavated fill material to designated upland disposal site(s) will likely expose other wetlands, creeks, streams, and/or other ecologically sensitive (i.e. Clean Water Act) protected areas, to the risk of significant or irrevocable degradation in the event of vehicular accidents.

f. Discrepancies in the exhibits submitted by the Complainant. In particular, discrepancies as to the alleged amount of fill placed on Respondents' property, and discrepancies as to the amount of fill located off of Respondents' property, and discrepancies as to photographs used by Complainant, which include the use of an incorrect baseline photograph which pre-dates the alleged violation. Furthermore, Mr. Kagel will testify as to incorrect sampling methods employed by the Complainant, and the flawed Restoration and Removal Plan submitted by Wilson Environmental Technologies, Inc.

Mr. Kagel will further testify about his experience as a federal wetlands regulator with the U.S. Army Corps of Engineers, and about his extensive knowledge of the laws and regulations pertaining to wetlands and Section 404 of the Clean Water Act. He will also testify regarding his experience with wetland delineations and assessments, as well as environmental impact assessments.



➤ Susan Kagel, M.S., Ph.D.  
Kagel Environmental, LLC  
3879 E. 200 N.  
Rigby, Idaho 83442

Dr. Kagel will testify about her investigation of Respondents' property, and about the extent and quality of the wetland fill. She will testify about the potential damage that may be caused by removal of the old fill. She will testify about her review of the materials submitted by the Complainant, including the exhibits identified in Complainant's Prehearing Exchange.

Dr. Kagel will further testify about her experience working with federal agencies, and about her knowledge of the laws and regulations pertaining to wetlands and Section 404 of the Clean Water Act. She will also testify regarding her experience with wetland delineations and assessments, as well as environmental impact assessments.

Dr. Kagel will also testify about her experience in analyzing historical aerial photography, and Geographic Information System ("GIS") data in determination of landscape changes and location of fill placement. She will also testify concerning the environmental damage in the form of carbon emissions that will result if fill is removed.

In particular, Dr. Kagel will testify as to the following points:

a. Excavating and transporting large amounts of fill to an upland site would result in an unacceptably large carbon footprint (See Respondents' Exhibit No. 11), and cause greater environmental damage than leaving fill in place and mitigating the alleged violation by another method.

b. The work of excavating, loading, transporting, and re-depositing approximately 39,000 cubic yards of fill material will require at least 200-days of men and heavy machinery; the associated human activity and loud noise of motorized equipment would cause significant disturbance, stress, and displacement of resident wildlife and birds.

c. Discrepancies in the exhibits submitted by the Complainant. In particular, discrepancies as to the alleged amount of fill placed on Respondents' property, and discrepancies as to the amount of fill located off of Respondents' property, and discrepancies as to photographs used by Complainant, which include the use of an incorrect baseline photograph which pre-dates the alleged violation. Furthermore, Dr. Kagel will testify as to incorrect sampling methods employed by the Complainant, and the flawed Restoration and Removal Plan submitted by Wilson Environmental Technologies, Inc.

**II. Copies of all documents and exhibits which each party intends to introduce into evidence at the hearing. The exhibits should include curriculum vitae or resume for each proposed expert witness.**

The documents and exhibits Respondents intend to introduce into evidence at the hearing are as follows:

<b>Respondents' Exhibit No.</b>	<b>Document</b>
Respondents' Exhibit No. 1	Resume of Ray Kagel, Jr., M.S.
Respondents' Exhibit No. 2	Resume of Susan Kagel, M.S., Ph.D.
Respondents' Exhibit No. 3	Map of Hydric and Non-Hydric Soils
Respondents' Exhibit No. 4	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated April 20, 1994
Respondents' Exhibit No. 5	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated April 29, 1994
Respondents' Exhibit No. 6	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated November 24, 2006
Respondents' Exhibit No. 7	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated July 23, 2009
Respondents' Exhibit No. 8	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated September 5, 2009
Respondents' Exhibit No. 9	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated October 6, 2011
Respondents' Exhibit No. 10	Aerial Photograph of 2160 Lafayette Street, Falconer, NY 14733 dated 2009
Respondents' Exhibit No. 11	Carbon Footprint of Fill Excavation Chart

**III. Each party shall submit a statement expressing its view as to the place for the hearing and the estimated amount of time needed to present its direct case.**

Respondents request that the hearing be held in Buffalo, New York, since this location is convenient for both parties.

Respondents estimate they will need one (1) day to present their direct case.



#### **IV. Why the proposed penalty should be reduced or eliminated.**

Respondents' believe that the proposed penalty should be reduced based on the following:

A. Nature, Circumstances, and Extent of the Violation: Aerial photographs and aerial hydric soils maps indicate that many non-hydric soils exist between Respondents' property and the nearest mapped traditionally navigable water ("TNW"), Cassadaga Creek. The creek is more than a one-third mile away from the fill closest to the creek, which fill is actually located on property that is not owned by Respondents. Moreover, such fill is isolated from the creek by a wide swath of non-hydric soils. Accordingly, the area of alleged violation is isolated from surrounding wetlands, and therefore is not likely to have a significant adverse environmental impact on a jurisdictional wetland. See Respondents' Exhibit No. 3. Furthermore, there are discrepancies in the amount of alleged fill on Respondents' property calculated by the Complainant, and that calculated by Respondents' witnesses. Therefore, the extent of the alleged violation is less than that claimed by the Complainant.

B. Inability to pay: The proposed penalty is clearly beyond the financial capability of the violator. The proposed penalty would seriously jeopardize the violator's ability to continue business operations and achieve compliance. Since the issuance of the EPA notice letter, Respondents have paid out approximately \$105,000, including legal fees; \$12,500.00 to Wilson Environmental; \$61,895.00 to environmental contractors and surveyors to perform the removal work completed to date; approximately \$10,000.00 in extra or overtime wages to Dependable employees to move cars and other equipment to clear areas for further work; and approximately \$5,000.00 to various contractors for materials, fencing, supplies, etc. Further, as a result of the EPA's notice letter, the City of Jamestown has determined to remove Respondent's company from the authorized towing list under City law. The towing portion of Respondent's business accounts for the largest part of the company's income and concomitantly, Mr. Whitehill's personal income. Since the City's removal of Respondent from the approved towing list, the company's income has decreased approximately sixty (60) percent. In addition, the constant rising price of gas and diesel fuel has taken a further toll on Respondent's business.

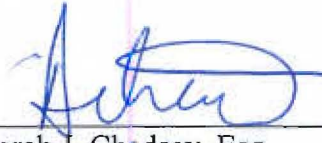
C. Degree of culpability: At the time of the original fill, Respondents were unaware of the nature and circumstances of their actions. Respondents reasonably believed that they were accommodating a request of local municipalities to put clean fill on the property, which was used in connection with road work. A subsequent investigation revealed that local municipalities and private companies have acknowledged that they used the property to dump fill. Accordingly, there are several other equally responsible parties.

D. Lack of Economic Benefit: Respondents have not obtained an economic benefit by obtaining an illegal competitive advantage, nor as the result of delayed or avoided pollution control expenditures during the period of noncompliance. As indicated in "B" above, Respondents have expended significant funds to perform the removal work

to date.

Furthermore, a majority of the fill materials were placed on the property more than five (5) years prior to the filing of the Complaint. Accordingly, with respect to claims relating to the alleged placement of fill materials on the property occurring more than five (5) years prior to the commencement of this action, the applicable statute of limitations, 28 U.S.C. § 2462, bars such claims.

Dated: December 14, 2011  
Buffalo, New York



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Deborah J. Chadsey, Esq.  
Kavinoky Cook LLP  
*Attorneys for Respondents*  
*Dependable Towing & Recovery, Inc., and*  
*David A. Whitehill,*  
726 Exchange Street, Suite 800  
Buffalo, New York 14210  
Telephone: (716) 845-6000



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
BEFORE THE ADMINISTRATOR**

<b>IN THE MATTER OF</b>	)	<b>Docket No. CWA-02-2011-3601</b>
	)	
<b>Dependable Towing &amp; Recovery, Inc.</b>	)	
<b>and David A. Whitehill,</b>	)	
	)	
<b>Respondents</b>	)	

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**Certificate of Service**

I certify that on December 14, 2011, I served the foregoing Respondents' Initial Prehearing Exchange, bearing the above referenced docket number, on the persons listed below, in the following manner:

Original (w/original exhibits) and one copy by Overnight Mail:

Karen Maples  
Regional Hearing Clerk  
Region 2  
U.S. Environmental Protection Agency  
290 Broadway -- 16th Floor  
New York, New York 10007-1866

Copy w/exhibits by Overnight Mail:

Eduardo J. Gonzalez, Esq.  
Assistant Regional Counsel  
U.S. Environmental Protection Agency  
290 Broadway, 16th Floor  
New York, New York 10007

Administrative Law Judge:  
The Honorable Barbara A. Gunning  
Office of Administrative Law Judges  
U.S. Environmental Protection Agency  
Franklin Court Building  
1099 14<sup>th</sup> Street, N.W., Suite 350  
Washington, D.C. 20005  
[Phone: (202) 564-6281 Attn: Mary Angeles, Legal Staff Assistant]

  
\_\_\_\_\_  
Erin L. Flynn, Paralegal



**Kagel Environmental, LLC**  
*Wetlands, Wildlife and Permitting Specialists*  
ray@kagelenvironmental.com  
susan@kagelenvironmental.com

3879 E 200 N  
Rigby, Idaho 83442  
Phone (208) 745 0076  
Cell (208) 313-3890  
Fax (208) 441-4382

**Ray L. Kagel, Jr., M.S.**

***Professional Expertise***

- Execution of wetland determinations and forensic analysis of alleged wetland violations.
- Preparation and implementation of wetland mitigation and restoration work plans.
- Assistance with comprehension of and compliance with federal Clean Water Act laws and regulations.
- Expert witness testimony in litigation involving wetlands or wildlife.
- Preparation of Section 404 permit applications and After-The-Fact (ATF) authorizations for discharges in regulated waters and wetlands.
- Interpretive analysis of aerial photography, soil surveys, topo surveys, and National Wetland Inventory (NWI) mapping.
- Preparation and implementation of wildlife management plans.

***Professional Positions***

- |              |                                                                                                                                        |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 2007-Present | Ray Kagel Jr., M.S., Consulting Wetland and Wildlife Scientist and Principal, Kagel Environmental, LLC, Rigby, Idaho.                  |
| 1999-2008    | Ray Kagel Jr., M.S., Consulting Wetland and Wildlife Scientist and Principal, Lone Goose Environmental, LLC, Rigby, Idaho.             |
| 1991-1999    | Environmental Resource Specialist (Regulatory Project Manager), U.S. Army Corps of Engineers, Idaho Falls, ID (Walla Walla District).  |
| 1989-1991    | Environmental Resource Specialist (Regulatory Project Manager), U.S. Army Corps of Engineers, Bismarck, ND (Omaha District).           |
| 1987-1989    | Environmental Resource Biologist (Regulatory Project Manager), U.S. Army Corps of Engineers, Philadelphia, PA (Philadelphia District). |
- Walla Walla District POC (Point-Of-Contact) and Final COE and EPA Authority for contested or complex wetland determinations in the state of Idaho.
  - Instructor of wetlands identification and delineation for the COE, EPA, NRCS and USFWS employees in the 1987, 1989, and 1991 (revised) Federal Manuals for Identifying and Delineating Jurisdictional Wetlands.
  - Administration and enforcement of Section 404 and Section 10 Permitting Programs, including NEPA compliance.
  - Review permit applications for compliance with NEPA and EPA 404 (b)(1) Guidelines, perform routine and comprehensive wetland determinations, review design, assess and approve river and stream bank stabilization and riparian habitat enhancement projects.







**Kagel Environmental, LLC**  
*Wetlands, Wildlife and Permitting Specialists*

- Preparation of biological evaluations and effect determinations for listed plant and animal species & critical habitat(s) pursuant to the Endangered Species Act.
- 1986 Consulting Wildlife Biologist, Hutchinson Island (7,000 acre coastal island), SC, and Camp Brian Farms (10,000 acre hunting plantation), Moorehead City, NC. Design, development, implementation, and day-to-day management of comprehensive wildlife management plans.
- 1983-1986 Wildlife Biologist, Montana Department of Fish, Wildlife, and Parks, Bozeman, MT.
- 1980-1984 Graduate Research Assistant, Mississippi State University, Starkville, MS. Performed cutting-edge research defining previously unknown diurnal whitetail buck movements in MS, AL, LA, GA, and TX. Collection and identification of wetland plants important to wildlife and waterfowl in MS, AL, LA, and TX.

***Education***

- M.S. Wildlife Ecology, 1984, Mississippi State University, Starkville, MS.  
B.S. Forest & Recreation Resources, 1975, Clemson University, Clemson, SC

***Certifications***

- 2006 River Restoration, Portland, OR  
1996 Fluvial Geomorphology, Pagosa Springs, CO  
1993 River Restoration, Coeur d'Alene, ID  
1992 Hydric Soils, Portland, OR  
1989 Environmental Laws & Regulations, Montgomery, AL  
1988 Wetlands Delineation, Kalamazoo, MI

***Selected Consulting Projects***

- 2011 Rich and Henderson, P.C., Easton MD: Forensic analysis of 80-acre alleged wetland violation, Federalsburg, MD. (Expected to go to Federal Court in 2012.)
- 2011 Session Law Firm, Kansas City, MO. Defense of a VFW post against wetland violation allegations. KE's forensic analysis indicated that there is no violation.
- 2010-2011 Amodio Stanley & Reeves LLC, Anchorage, AK. Defense of client against allegations of filling a wetland. Original charge was filling 3.5 acres, KE was successful in reducing charge to less than 0.3 acre of wetland filled. Scheduled to be heard by an Administrative Law Judge in 2012 due to penalty dispute.
- 2009 – 2010 BHW Law and Jim Seibe Law: Defense witness for federal criminal trial, disputed wetland destruction. Forensic analysis of alleged violation site, data analysis, report and court exhibit preparation. Analysis of prosecution exhibits, extensive document research into application of wetland regulations and provided direction as to best countermeasures of prosecution's case. Defendant acquitted on all charges, Coeur d'Alene, ID.



**Kagel Environmental, LLC**  
*Wetlands, Wildlife and Permitting Specialists*

- 2009-2011 Chantelle and Mike Sackett (Pacific Legal Foundation), Priest Lake, ID. Forensic analysis in disputed wetland violation. Case will be argued in the U.S. Supreme Court in the first quarter of 2012.
- 2008-2009 Snell & Wilmer, Salt Lake City, UT. Represent developer of a Park City, Utah project in bid to have property's wetlands determined isolated.
- 2008 – 2009 Thomsen-Stephens Law Offices, PLLC (J. Michael Wheeler). Unpermitted bank protection project. Client was convicted of misdemeanor wetland violation instead of felony, as originally threatened by U.S. Attorney.
- 2006 – 2009 Thomsen-Stephens Law Offices, PLLC (J. Michael Wheeler). Violation of wetland permitting conditions in a manner that could affect Endangered Chinook Salmon. Forensic analysis of alleged violation and prepared expert report detailing that effects of violation on wetlands were minimal. Analysis of prosecution exhibits and provided opinion as to validity and best countermeasures. Sentence was reduced from 3 years in a federal penitentiary to 6 months house arrest and restoration of the site. Negotiated terms of restoration with federal agencies including USACOE, EPA, NOAA, USFWS and Idaho DNR, then developed restoration plan satisfying all agency requirements.
- 2005-2006 Atkin Law Offices, P.C., Salt Lake City. Unpermitted work in intermittent stream. Expert Witness for sentencing phase of federal conviction in U.S. District Court, Pocatello, ID. Sentence was reduced from 8 years in a federal penitentiary to 3 years when Mr. Kagel testified that the presence of wetlands and the time of the violation could not be determined, and that minimal, if any, environmental damage resulted from the client's work.
- 2006 Idaho Bar Association. Development and presentation of 3 hour CE course to the Real Property Section on Wetlands Issues and Regulations pertaining to the Federal Clean Water Act, July, 2006, Sun Valley, Idaho.
- 2007-present Forensic analysis other alleged wetland violations in Iowa, Illinois, South Carolina, New York, Arkansas, Missouri, Wyoming, Utah, Alaska and Idaho.

***Professional Organizations and Memberships***

Society of Wetland Scientists  
The Wildlife Society  
North American Moose Foundation  
National Wildlife Federation  
Foundation for North American Wild Sheep  
Rocky Mountain Elk Foundation  
Ducks Unlimited  
Pheasants Forever  
Quality Deer Management Association  
Pope & Young Club  
Associated General Contractors of Iowa, Associate Member

***Extensive References Available Upon Request***





**Kagel Environmental, LLC**  
*Wetlands, Wildlife and Permitting Specialists*  
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susan@kagelenvironmental.com

3879 E 200 N  
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Phone (208) 745-0076  
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### **Susan Kagel, M.S., Ph.D.**

#### ***Professional Expertise***

- Execution of wetland determinations and forensic analysis of alleged wetland violations.
- Preparation and implementation of wetland mitigation and restoration work plans.
- Assistance with comprehension of and compliance with federal Clean Water Act laws and regulations.
- Expert witness testimony in litigation involving wetlands.
- Preparation of Section 404 permit applications and After-The-Fact (ATF) authorizations for discharges in regulated waters and wetlands.
- Literature and web research related to environmental and legal matters.
- Interpretive analysis of aerial photography, soil surveys, topo surveys, and National Wetland Inventory (NWI) mapping.
- Preparation of graphics for reports and court exhibits.

#### ***Professional Positions***

- |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2007-Present | Susan Kagel, M.S., Ph.D., Consulting Wetland Scientist Case Manager, Kagel Environmental, LLC, Rigby, Idaho.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2009-Present | Susan Kagel, Ph.D., M.S., Principal, Alpenglow Environmental Solutions, LLC, Rigby, Idaho. Providing NPDES and NEPA Compliance assistance and market research for environmental matters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2007         | Wetland Scientist Trainee, Lone Goose Environmental, LLC, Rigby, Idaho. <ul style="list-style-type: none"><li>▪ 300+ hours of field training in wetland delineation, including vegetation, soils and hydrology, regulations, permit application preparation, and report preparation.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2001-2007    | Susan Wimer-Mackin, M.S., Ph.D. Director of Pre-Clinical Immunology – LigoCyte Pharmaceuticals, Inc., Bozeman, MT. <ul style="list-style-type: none"><li>▪ Directed and supervised a team of scientists in performing pre-clinical research on biodefense vaccines.</li><li>▪ Principal investigator on contracts with U.S. Department of Defense, 2001-2007.</li><li>▪ Secured 5 year, \$5M National Institute of Health for Preclinical Development of Non-Invasive Anthrax Vaccine and served as Principal Investigator.</li><li>▪ Developed comprehensive program (including record keeping, safety protocols, training and security) and secured CDC approval for possession and utilization of the registered agent <i>Bacillus anthracis</i> (anthrax).</li></ul> |
| 1996-2001    | Post-doctoral Fellowship, Cellular Biology, Children's Hospital and Harvard University Medical School, Boston, MA. <ul style="list-style-type: none"><li>▪ Secured and successfully completed competitive National Institute of</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



*Susan Kagel, M.S., Ph.D*

- Health Post-Doctoral Fellowship for research on toxin trafficking in mamalian cells.
- 1991-1996 Graduate Research Assistant, Veterinary Molecular Biology, Montana State University, Bozeman.
- Dissertation project concerned cellular protein trafficking.
- 1989-1991 Susan Wimer, M.S., Research Associate in Animal and Range Science, Montana State University, Bozeman. Trials tested the effects of various forage/nutritional regimens on bovine production and fertility.
- Responsible for ruminant nutrition trials, including experimental design, data collection, laboratory and statistical analysis.
- 1984-1986 Susan Wimer, M.S., Agricultural Products Specialist, Agricultural Products, 3M, Lincoln, NE. Lincoln, Nebraska.
- National Expert for cool season pasture management with plant growth regulators.
  - Responsible for identification of suitable candidate pastures, application of plant growth regulators and monitoring of cool season grass pastures.
  - Collected all data including vegetative quality, animal performance and plant response throughout Missouri, Nebraska, Kansas, Iowa and Colorado in support of EPA label submission for use of Embark™ (mefluidide) on cool season grass pastures.
  - Chief Consultant for cattle producers on chemical application, weed control and management of grazing.
- 1982-1986 Susan Wimer, Graduate Research Assistant, University of Nebraska, Lincoln.
- Thesis research concerned pasture application of mefluidide and effects on nutritive value of cool season grasses for beef cattle grazing.
  - Conducted research into various pasture management and forage usage regimens.
  - Inducted into Gamma Sigma Delta, Honor society of Agriculture.
- 1980-1982 Undergraduate Research Assistant, Department of Animal Science, University of Missouri, Columbia. Received various College of Agriculture scholarships, including the Kansas Bluestem Company Research Scholarship, 1981.
- Responsible for complete management of nutritional metabolism trials in sheep and cattle, including chemical analysis of animal and forage analysis, and statistical analysis of data.
  - Received various College of Agriculture scholarships, including the Kansas Bluestem Company Research Scholarship, 1981 for forage research.

### ***Education***

- Ph.D. Veterinary Molecular Biology, 1996, Montana State University.
- M.S. Animal Science, 1986, University of Nebraska, Lincoln.
- B.S. Agriculture, 1982, University of Missouri, Columbia.



*Susan Kagel, M.S., Ph.D*

***Selected Consulting Projects***

- 2011 Rich and Henderson, P.C., Easton MD: Forensic analysis of 80-acre alleged wetland violation, Federalsburg, MD. (Scheduled to go to Federal Court in 2012.)
- 2011 Session Law Firm, Kansas City, MO. Defense of a VFW post against wetland violation allegations. KE's forensic analysis indicated that there is no violation.
- 2011 Snell & Wilmer, Salt Lake City, UT. Represent developer of a Park City, Utah project in bid to have property's wetlands determined isolated.
- 2010-2011 Amodio Stanley & Reeves LLC, Anchorage, AK. Defense of client against allegations of filling a wetland. Forensic analysis of alleged violation site, including analysis of historical aerial photography. Original charge was filling 3.5 acres, KE was successful in reducing charge to less than 0.3 acre of wetland filled. Scheduled to be heard by an Administrative Law Judge in 2012 due to penalty dispute.
- 2009 – 2010 BHW Law and Jim Seibe Law: Defense witness for federal criminal trial, disputed wetland destruction. Forensic analysis of alleged violation site, data analysis, report and court exhibit preparation. Analysis of prosecution exhibits, extensive document research into application of wetland regulations and provided direction as to best countermeasures of prosecution's case. Defendant acquitted on all charges, Coeur d'Alene, ID.
- 2009-2011 Chantelle and Mike Sackett (Pacific Legal Foundation), Priest Lake, ID. Forensic analysis in disputed wetland violation. Case will be argued in the U.S. Supreme Court in the first quarter of 2012.
- 2008 – 2009 Thomsen-Stephens Law Offices, PLLC (J. Michael Wheeler). Forensic analysis of unpermitted bank protection project and negotiated for defendant with EPA. Prepared restoration/mitigation plan. Client was convicted of misdemeanor wetland violation instead of felony, as originally threatened by U.S. Attorney. Site was successfully restored.
- 2006 – 2009 Thomsen-Stephens Law Offices, PLLC (J. Michael Wheeler). Violation of wetland permitting conditions in a manner that could affect Endangered Chinook Salmon. Forensic analysis of alleged violation and prepared expert report detailing that effects of violation on wetlands were minimal. Analysis of prosecution exhibits and provided opinion as to validity and best countermeasures. Sentence was reduced from 3 years in a federal penitentiary to 6 months house arrest and restoration of the site. Negotiated terms of restoration with federal agencies including USACOE, EPA, NOAA, USFWS and Idaho DNR, then developed restoration plan satisfying all agency requirements.
- 2007-present Forensic analysis other alleged wetland violations in Iowa, Illinois, South Carolina, New York, Arkansas, Missouri, Wyoming, Utah, Alaska and Idaho.

Susan Kagel, M.S., Ph.D

### ***Professional Organizations and Memberships***

American Society of Wetland Scientists

Associated General Contractors of Iowa, Associate Member

North American Moose Foundation

### ***Publications & Presentations***

*Note: Susan Kagel was formerly known as Susan Wimer and Susan Wimer-Mackin.*

#### Publications:

1. **Wimer-Mackin, S.**, M. Hinchcliffe, C.R. Petrie, S.J. Warwood, W.T. Tino, M.S. Williams, J.P. Stenz, A. Cheff, C. Richardson. 2006. An intranasal vaccine targeting both the *Bacillus anthracis* toxin and bacterium induces robust protection against aerosol anthrax challenge in rabbits. *Vaccine* 24: 3953-3963.
2. **Wimer-Mackin, S.**, R. K. Holmes, A. A. Wolf, W. I. Lencer, and M. G. Jobling. 2001. Characterization of Receptor-Mediated Signal Transduction by *Escherichia coli* Type IIa Heat-Labile Enterotoxin in the Polarized Human Intestinal Cell Line T84. *Infect. Immun.* 69:7205-7212.
3. Mel, S. F., K.J. Fullner, **S. Wimer-Mackin**, W.I. Lencer, J.J. Mekalanos. 2000. Association of protease activity in *Vibrio cholerae* vaccine strains with decreases in transcellular epithelial resistance of polarized T84 intestinal epithelial cells. *Infect. Immun.* 68:6487-6492.
4. Beauregard, K.E., **S. Wimer-Mackin**, R.J. Collier, W.I. Lencer. 1999. Anthrax toxin entry into polarized epithelial cells. *Infect. Immun.* 67:3026-3030.
5. Mills, J.S., H.M. Miettinen, D. Barnidge, M.J. Vlases, **S. Wimer-Mackin**, E.A. Dratz and A.J. Jesaitis. 1998. Identification of a ligand binding site in the human neutrophil formyl peptide receptor using a site-specific fluorescent photoaffinity label and mass spectrometry. *J. Biol. Chem.* 273: 10428-10435.
6. Wolf, A.A., M.G. Jobling, **S. Wimer-Mackin**, M. Ferguson-Maltzman, J.L. Madara, R.K. Holmes and W.I. Lencer. 1998. Ganglioside structure dictates signal transduction by cholera toxin and association with caveolae-like membrane domains in polarized epithelia. *J. Cell Biol.* 141:917-927.
7. **Wimer-Mackin, S.** and B.L. Granger. 1996. Transmembrane domain effects on the intracellular distribution of lysosomal membrane glycoprotein A (LAMP-1). *Biochem. Biophys. Res.* 229:472-478

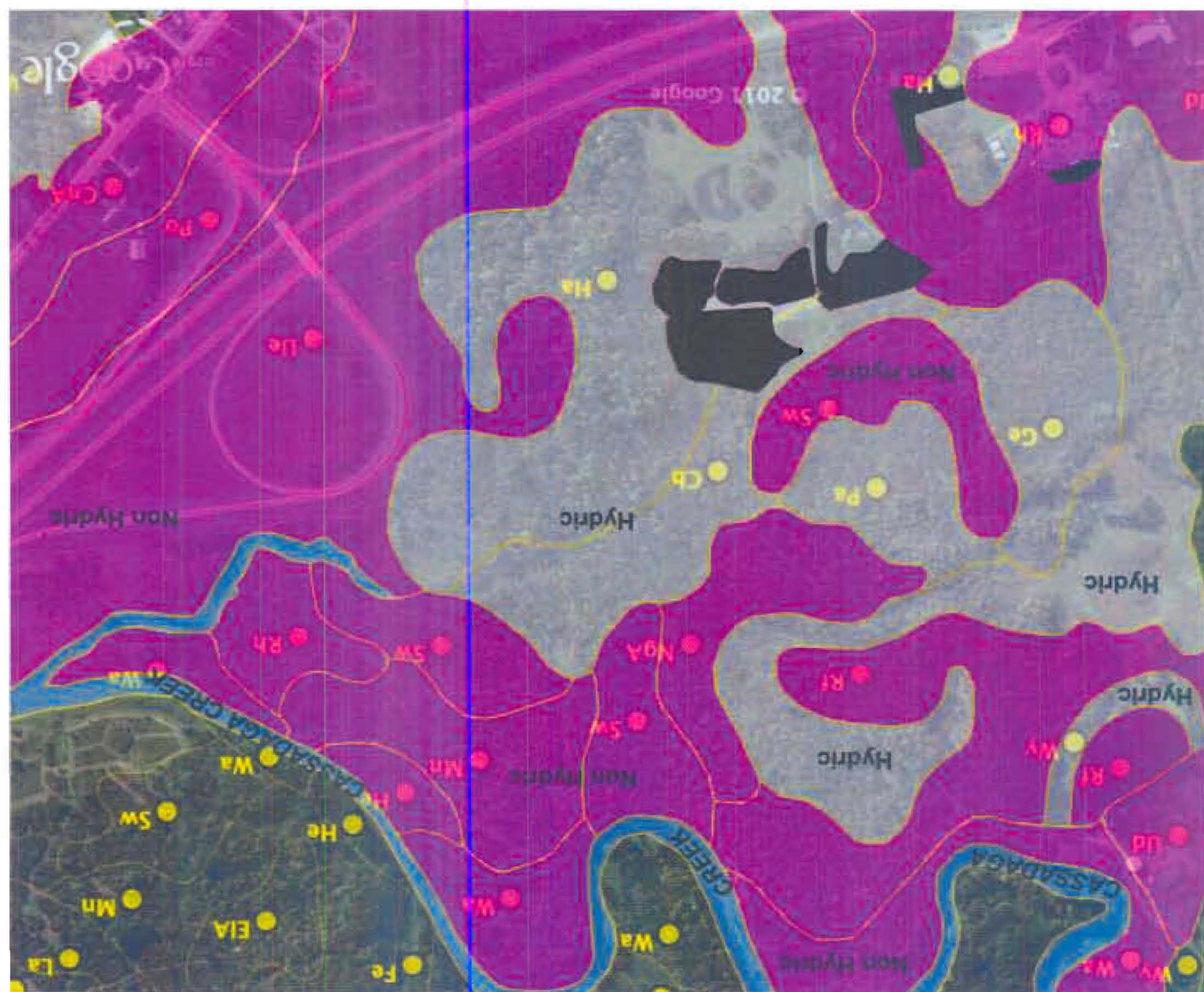
#### Abstracts and Presentations (in chronological order):

1. **Wimer-Mackin, S.**, M. Hinchcliffe, C. Petrie, S. Warwood, A. Cheff, J. Stenz, and C. Richardson. 2005. Robust protection against inhalation anthrax by intranasal immunization with a vaccine targeting both the toxin and bacterium of *Bacillus anthracis*. Platform talk, *Bacillus ACT05 Conference*, Santa Fe, NM.
2. Tino, W.T., P. Mascolo, D. Campbell, M. Williams, C. Richardson, A. Palacanda, **S. Wimer-Mackin**. 2005. Stimulation of innate immune responses by capsule extract



- antigen of *B. anthracis*. Poster #109, Bacillus ACT05 Conference, Santa Fe, NM.
3. Tino, W.T., M. Williams, C. Petrie, D. Campbell, **S. Wimer-Mackin**. 2005. Characterization of murine T-Cell responses to anthrax antigens. Poster #43, *Bacillus* ACT05 Conference, Santa Fe, NM.
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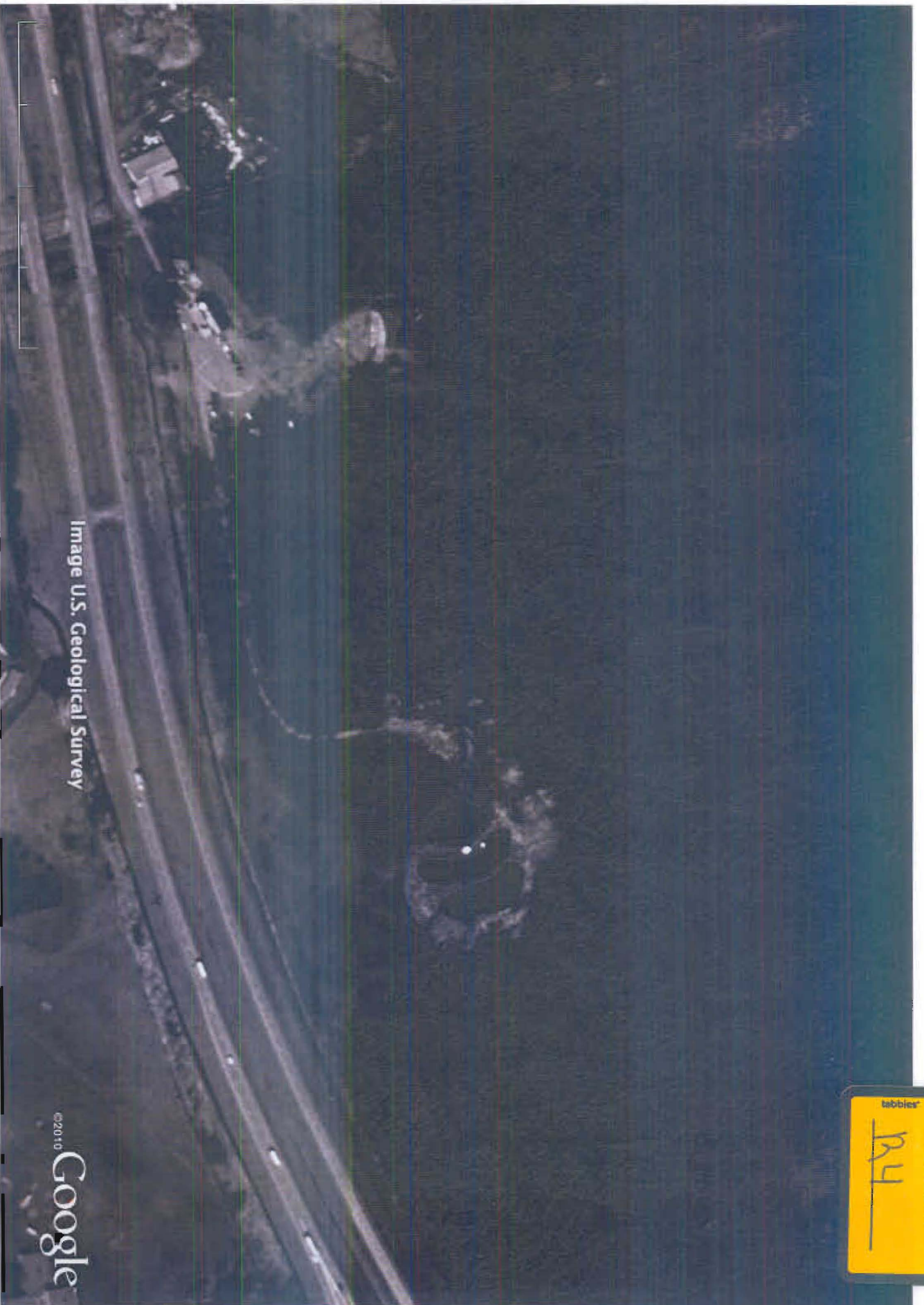


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September 5, 2009

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Historical Aerial Photo  
2009

**2160 LAFAYETTE ST  
FALCONER, NY 14733**

Target Site: 42.127328 -79.20256; Job Number: 1



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1 inch equals 750 feet



## CARBON FOOTPRINT OF FILL EXCAVATION

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*Assumptions:* Fill is an average of 3' (1 yard) deep.  
8.2 acres of fill to be removed

$$1 \text{ acre} = 43,560 \text{ ft}^2 = 4,840 \text{ yd}^2$$

$$4,840 \text{ yd}^2/\text{acre} \times 8.2 \text{ acres} \times 1 \text{ yd deep} = 39,688 \text{ cy (cubic yards) fill in 8.2 acres}$$

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*Assumptions:* 12 cy dump truck, fuel efficiency is 5-8 mpg  
10 mile round trip for dump truck to deposit excavation spoils, uses 2.5 gal gasoline per load

$$39,688 \text{ cy fill}/12 = 3,307 \text{ dump truck loads}$$

$$3,307 \text{ loads} \times 2.5 \text{ gal gasoline} = 8,250 \text{ gal gas required for dump trucks}$$

---

*Assumption:* 1 gal gasoline produces 19.643 lbs CO<sub>2</sub>

$$8,250 \text{ gal gasoline} \times 19.643 \text{ lbs CO}_2/\text{gal gasoline} = 64,966 \text{ lbs CO}_2 \text{ produced by dump trucks for trucking excavation spoils}$$

---

*Assumptions:* 1 yard excavator, uses ~50 gal/diesel per 8 hour day, moderately difficult digging

Loading 12 cy onto dump truck takes 30 minutes, or 2 loads/hr

$$3,307 \text{ dump truck loads} = 1,654 \text{ hours loading} = 207 \text{ eight hour days of excavation}$$

$$207 \text{ days} \times 50/\text{gal diesel/day} = 10,335 \text{ gal diesel}$$

---

*Assumption:* 1 gal diesel produces 22.377 lbs CO<sub>2</sub>

$$10,335 \text{ gal diesel} \times 22.377 \text{ lbs CO}_2/\text{gal} = 231,602 \text{ lbs CO}_2 \text{ from excavator operation}$$

$$64,966 + 231,602 = 296,568 \text{ lbs CO}_2 \text{ produced}$$

$$= >148 \text{ tons CO}_2 \text{ produced}$$

$$= >18 \text{ tons CO}_2 \text{ produced per acre of fill removed}$$

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References:

[http://www.carbonfund.org/site/pages/carbon\\_calculators/category/Assumptions](http://www.carbonfund.org/site/pages/carbon_calculators/category/Assumptions)

