GET WET!

Center Ossipee, New Hampshire
Spring 2010

Follow the PowerPoint Guidelines

- Introduce What, Why, & Where
- Present results as graphs
- Use lots of pictures
- Wrap-up ideas

- Community leaders will assist you in small groups to understand the information

What, Why, Where, & How

- Tell the audience what you were testing for (6 parameters)
- Tell Them why you were testing for those parameters (drinking water health/resource protection)
- Tell them where the testing takes place include:
  - Habitat Types
  - Local Geology (orogenic and glacial)
  - Land-use (causes? historical?)
- Tell them how you tested the parameters (go through kits on stage)

What?

- Hardness
- pH
- Conductivity
- Nitrates
- Iron
- Sodium & Chloride

Why?

- Historical groundwater/drinking water issues in your area
- Local drinking water concerns relating to:

PRIVATE WELL WATER
And
TOWN WELL WATER

(i.e., E.Coli from main breaks or flodding; water scarcity, previous or present industries, old dump sites, etc.)

Where?

- What are the land use issues that may effect groundwater wells (i.e., industry, natural, private septic, etc.)

- Does the well water in your area generally come from: an aquifer, unconfined aquifer (water table), or bedrock fractures

Land Use

- septic systems
- salted roads and uncovered salt piles
- leaky underground storage tanks
- industrial sites, waste disposal facilities
- agricultural land
- highways
- historical issues (tanneries, mills, old land fills, etc.)
- New England's acidic soils and rain (dissolved bedrock)

http://www.plainfieldnh.org/NRI/BNRI_Gwtr.html#GWMap

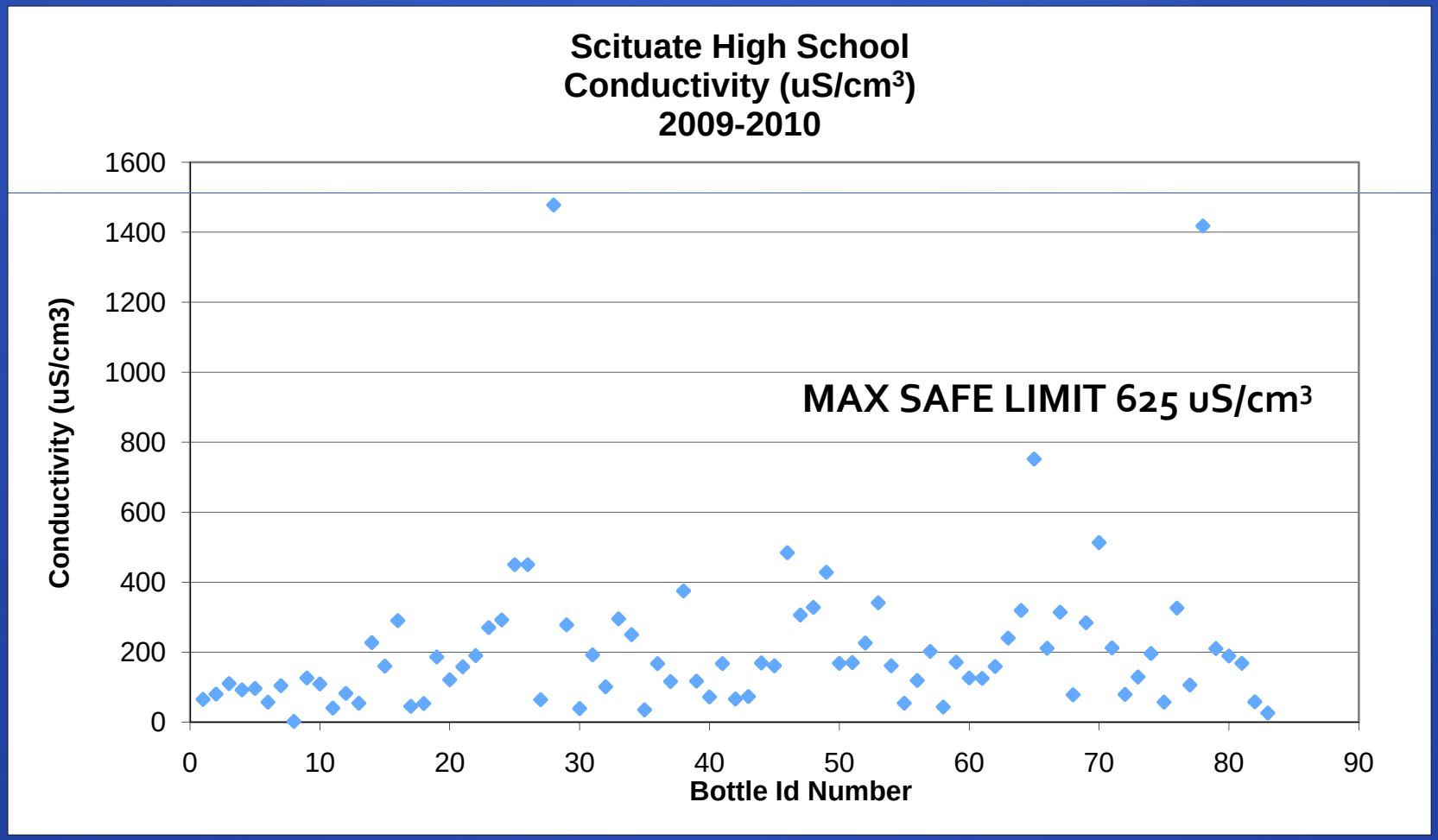
How?

Talk/Show your audience how you tested the parameters in the classroom
(using test kits)

Results

- Graphs
- Statistics from Excel
- Excel spread sheets
- Google Earth Maps
- GIS Maps from the local GIS Expert

Student Graph of Parameters (for each of the six tests)



Statistics from Excel

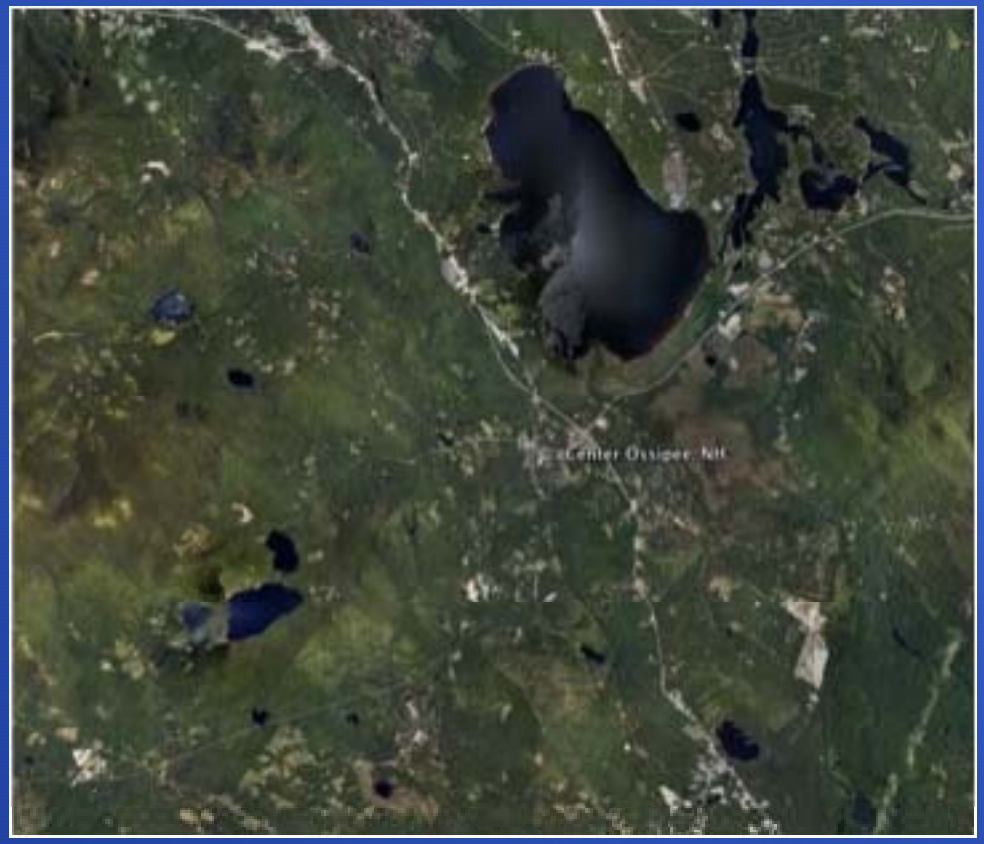
mean	**212**
median	**161**
mode	**57**
standard deviation	**235**
range	**2-1478**
MAX SAFE LIMIT	**625**

DO STATISTICS FOR EACH OF THE SIX TESTS

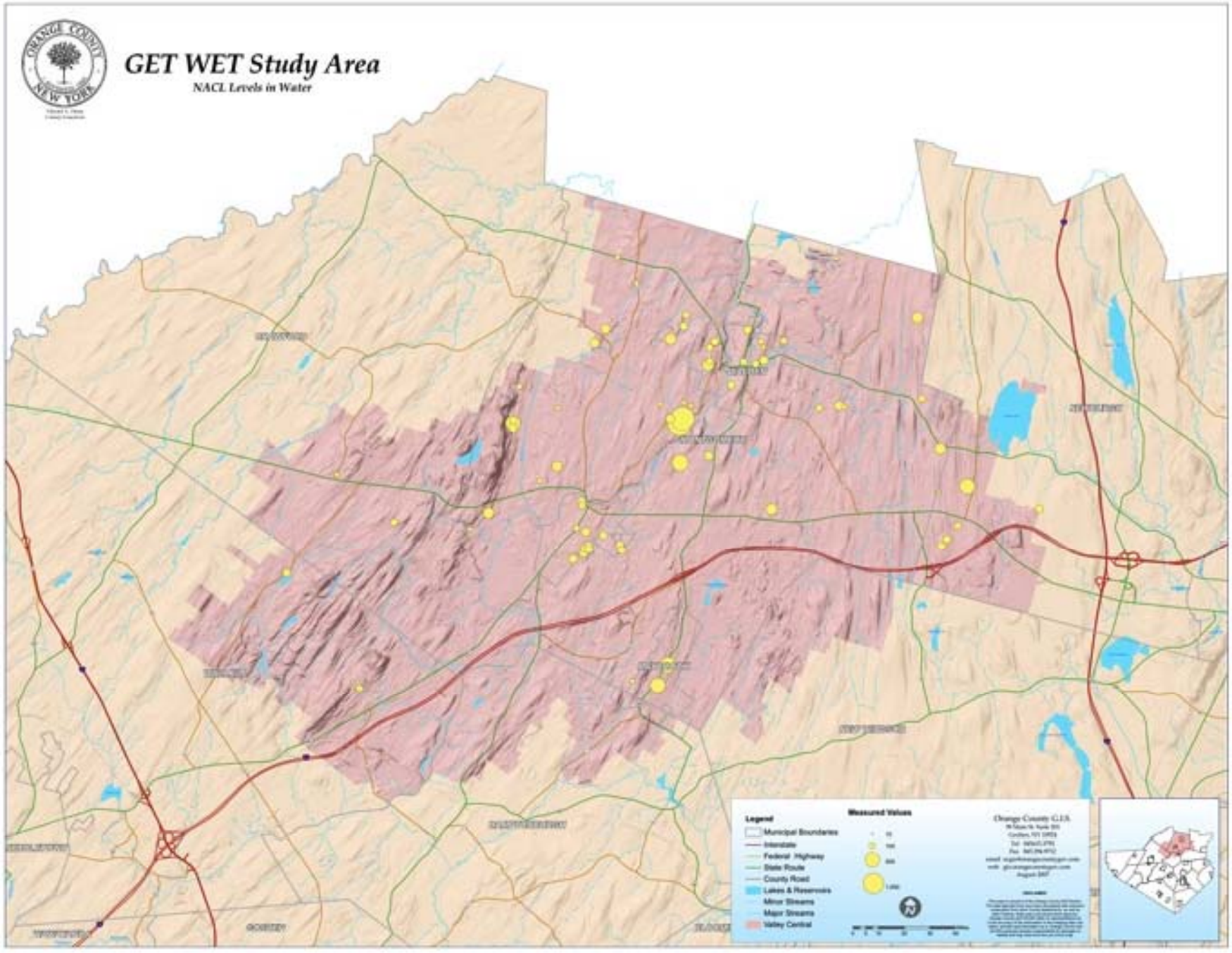
EXCEL SPREAD SHEETS

GET WET! Excel Sheet			Name of School:		Ossipee Center School		2009-2010
Bottle Identification Number	Chloride (mg/L)	NaCl (mg/L)	Nitrate (mg/L)	pH	Hardness (mg/L CaCO3)	Fe (mg/L)	Conductivity (uS/cm)
224	10	8	0	5.9	0	0	9
219	180	14.4	0.25	7.2	100	0.15	165
228	10	16	0	7	0	0	16
232	110	176	0.25	5.8	20	0.15	275
221	10	8	0.25	6.6	20	0	41
201	75	120	1.5	6.8	80	0.15	232
223	70	112	0	7.4	60	0	127
214	60	96	0	7.4	60	0	75
234	20	32	0.25	7.6	40	0	0.75
226	30	48	0	7.6	60	0.15	175
216	20	32	1.25	7.8	40	0.15	94
208	15	24	0.25	7.7	40	0.15	80
212	40	64	0	7.2	40	0.15	107
231	15	24	0	8	0	0.15	188
222	20	32	0	6.5	20	0.15	107
229	60	96	0	6.5	40	0.15	61
217	15	24	0	7.6	60	0.7	131
233	140	224	0	5.7	40	0.15	275
218	10	16	0	na	na	4.5	na
225	10	16	0.25	7.3	20	0.15	0.46
203	15	24	0.5	5.3	20	15	0.4
215	80	120	0	8.3	80	0.15	318
207	30	48	0	6.9	40	0.15	148
209	10	16	0	7.7	40	0.7	86
230	15	24	0	8.1	80	0.15	137
211	20	32	0	8.1	100	0.15	1.81
220	10	16	0	6.2	20	0.15	24
202	25	70	0	7.1	60	0.3	171
206	55	88	0.25	7.1	80	0.15	169
204	25	40	0.5	6	20	0.15	45

Geographic Information Systems (GIS) Maps



Range Maps
-nitrates
-salinity
-iron
-conductivity
-hardness
-total Iron


GET WET Study Area
NACL Levels in Water
Legend
Municipal Boundaries
Interstate
Federal Highway
State Route
County Road
Lakes & Reservoirs
Minor Streams
Major Streams
Valley Central
Measured Values

Conclusion

- Can you make assumptions based on results?

- How can you better define your results?

Conclusion Continued

- Recommendations:
  - What chemical parameters should private wells in your community be tested for that have not been covered by GET WET! (i.e., Arsenic, Radon, MTBE etc.,)
  - Which organizations does the community contact if they have questions or concerns regarding their private wells
  - How often to test wells and where to get them tested (state certified labs).
- THANK YOUR AUDIENCE

Recap

- Intro: with what, where, and why
- How: (test kits on stage)
- Results: graphs, tables, & statistics
- Conclusion: recommendations

THANK YOU!!!!