



Public Services

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VERN M. REDIFER, P.E., Director

January 22, 2016

Charles McKinney
Department of Ecology, Central Region Office
1250 West Alder Street
Union Gap, WA 98903

Re: **Lower Yakima Valley GWMA - 2015 Fourth-Quarter Report (IAA No. C 1200235)**

Dear Charlie:

Enclosed please find one (1) copy of Yakima County's fourth-quarter report as required under Attachment A, Statement of Work, Agreement No. C 1200235 between the State of Washington Department of Ecology and Yakima County.

This report addresses deliverables 1.1 and 2.2 as required under the agreement.

Deliverable 2.1, invoices, to be sent under separate cover.

If you have any questions, please let me know.

Thank you.

Lisa H. Freund, Administrative Manager
Yakima County Public Services

enclosure

Yakima County ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding Yakima County's Title VI Program, you may contact the Title VI Coordinator at 509-574-2300.

If this letter pertains to a meeting and you need special accommodations, please call us at 509-574-2300 by 10:00 a.m. three days prior to the meeting. For TDD users, please use the State's toll free relay service 1-800-833-6388 and ask the operator to dial 509-574-2300.

IAA No. C 1200235 – Fourth Quarter 2015 Report
Lower Yakima Valley GWMA
December 31, 2015

TASK 1 - ADMINISTRATIVE FUNCTIONS
DELIVERABLES

1.1 Meeting Records

For each meeting of the GWAC, submit a copy of the agenda, minutes, attendance and public meeting notice at the end of each quarter.

Attachment [A] includes the final GWAC meeting summary of August 20, 2015; the draft GWAC meeting summary of October 15, 2015; the Education and Public Outreach (EPO) Working Group summary of October 7, 2015; the Irrigated Ag Working Group (IAWG) summaries of October 13 and December 15, 2015; the Data Collection, Characterization and Monitoring Working Group summaries of October 8, November 12, and December 10, 2015; and the Regulatory Framework Working Group summaries of October 14 and November 18, 2015. The Livestock/CAFO, Residential, Commercial, Industrial, and Municipal (RCIM) and Funding Working Groups did not hold meetings in the fourth quarter.

TASK 2 - PROGRAM FUNCTIONS
DELIVERABLES

2.2 Status Report

Submit written quarterly status reports summarizing GWAC plans, activities and work products, and describing any interlocal agreements or other contracts by the end of each quarter.

The GWAC held one meeting on October 15. The final meeting of the year, scheduled for December 17, was canceled due to inclement weather.

Membership Update. New member Lucy Edmondson, Director of EPA Region 10, was introduced at the October meeting. She replaces Tom Eaton as EPA's primary representative. Ginny Prest was introduced as the primary representative for the Department of Agriculture (WSDA), as Kirk Cook has relocated to Bend, Oregon. Jaclyn Hancock will serve as WSDA's alternate. Sage Park, the new director at Ecology's South Central Office, is now Ecology's alternate representative, replacing Tom Tebb.

GWAC 2016 Meeting Location. At the October 15 meeting the GWAC expressed interest in moving its bimonthly meetings back to the Denny Blaine Boardroom in Sunnyside. County staff was directed to investigate the room's availability in 2016 and schedule as many GWAC meetings as possible at that location.

Work Plans and Products

Deep Soil Sampling. The third round of deep soil sampling was completed in the fourth quarter. Samples were procured from 60 participating locations. Retakes were taken on three

fields from this round to verify accuracy. All of the data and questionnaires were sent to Yakima County for processing with the results expected to be tabulated early in 2016.

Nitrogen Loading Assessment. Changes in staffing at WSDA resulted in a new division of project duties. WSDA is still handling irrigated agriculture. Yakima County GIS is handling residential/commercial/industrial/municipal (RCIM) data. Kirk Cook continues to handle Livestock/CAFO's. The data and loading assessment have been delivered to peer reviewers (Melanie Redding, Ginny Stern, and Nancy Darling). They intend to complete their work by the end of January 2016. The Irrigated Agriculture work, performed by Perry Beale and Kelly McLean at WSDA, and Yakima County's data are expected to be ready for peer review by the end of January 2016.

Ambient Groundwater Monitoring Network. On December 8 Yakima County signed a contract with Pacific Groundwater Group (PGG) in the amount of \$37,500 to design an ambient groundwater monitoring system for the Lower Yakima Valley Groundwater Management Area. PGG will propose the optimum number and location of monitoring wells. They will take the available testing data and data gathered by others and will propose a number of sites and locations. They will work with the County so that sites are located either in public right-of-way areas or on public property. They will also recommend a set of surface water stations that could be monitored in concert with recommended groundwater well locations. These will reflect shallow groundwater conditions during non-irrigation seasons so these statistic variables might be factored in as well.

After PGG recommends a list of locations and number of sites, they will be prioritized to accommodate the available funding to accomplish this task. PGG will participate in two Data Working Group meetings and receive direction from this group.

The contract with PGG is included as Attachment [B]

High Risk Well Assessment Survey Phase II. Bilingual radio ads announcing the survey were initiated in the fourth quarter. Flyer distribution continued at local events, agencies and businesses. As of December 31 the Yakima Health District had completed approximately 100 high risk well assessment sampling surveys in the Lower Yakima Valley GWMA. The contract with the health district calls for 200 surveys to be completed by February 29, 2016.

In December an evaluation of EPO's outreach methods (direct mail, radio advertising, flyers, and newspaper coverage) indicated that direct mail was the most cost-effective method of eliciting participation. Accordingly, a second direct mail piece is planned for January 2016 to help meet the 200-household survey goal.

The broadcast agreements are included as Attachment [B]

Working Group Activities:

Education and Public Outreach (Lisa Freund, Chair)

The EPO met on October 7 to review the progress of the high risk well assessment survey and to review new website features. As of that week, the Yakima Health District had received over 90 calls from households expressing interest in participating in the survey, and 24 surveys and samples had been completed. Initial results indicated that most participants had learned about the survey through the direct mail piece, with newspaper articles being the second most effective outreach tool.

Lee Murdock walked the group through the "notify me" feature of the new Civic Plus website, explaining that it would replace the MS Outlook meeting notification system that the County had previously employed. The group agreed that written instructions should be distributed and shared with the GWAC at its October meeting. After further discussion the group also agreed to recommend a streamlined resources page to the GWAC, and also recommend that proposed 'add backs' to the page should occur only with the GWAC's approval.

Data Collection (Melanie Redding, Chair) The Data Collection working group met on October 8, November 12 and December 10, 2015, to continue its work on the Ambient Groundwater Monitoring Program scope of work and to discuss progress on the Nitrogen Loading Assessment. On December 8 Yakima County entered into an agreement with PGG in the amount of \$37,500 to design the monitoring system.

The Nitrogen Loading Assessment progress was discussed at the three meetings. At the November meeting it was announced that three different groups have taken up different aspects of the report. WSDA is handling irrigated agriculture; Yakima County GIS is handling residential/commercial/industrial/municipal; and the livestock draft report has already been written by Kirk Cook. The latter work has not yet been peer reviewed. The group discussed the details in the draft report. Melanie stressed that the loading surveys were not meant to be comprehensive, but rather a guide for how farmers/landowners have been doing in the past year. How people use this information is still being considered in the preparation of the report.

At the December meeting it was noted that the peer review of the Livestock/CAFO data and loading assessment was anticipated to be completed by the end of January 2016. The irrigated agriculture and RCIM components were also expected to be ready for peer review by that date.

Irrigated Ag (IAWG) (Jim Trull, Chair)

The group met on October 13 and December 15. At both meetings there was considerable discussion around one member's questions and comments related to the first two rounds of sampling. At the December meeting the group discussed the preliminary results from the third round of deep soil sampling. The results of the third round of deep soil sampling were expected to be ready for the group's review by early 2016.

Residential, Commercial, Industrial, and Municipal (RCIM) (Robert Farrell, Chair)

The group did not meet in the fourth quarter.

Regulatory Framework (Jean Mendoza, Chair)

The Regulatory Framework working group met on October 14 and November 18 to hear presentations from Yakima County regarding rules and regulations that the County implements and enforces. The primary focus was the Yakima County Growth Management Act. Staff outlined the history of this statute and went on to describe the Yakima County Comprehensive Plan – 2015.

Staff described protection of critical areas, zoning procedures, agricultural use areas, mapping, and future land use maps. They explained the Unified Land Development Code, the Critical Areas Ordinance, the Shoreline Master Program and the Stormwater and Drainage Ordinance. They described the County's Allowable Land Use Table, General Development Standards, the permitting process, the newly introduced Voluntary Stewardship Program, Critical Aquifer Recharge Areas, Critical Area Review policies, and County requirements regarding the State Environmental Protection Act (SEPA).

The work group will begin 2016 by planning ways to analyze the data that has been gathered to date. The group will then work on meeting the requirements of WAC 173-100-100 and the GWMA work plan.

GWMA Website

The GWMA website migrated to a new program under Yakima County's site on September 15. In October the GWAC was introduced to a new web feature called "Notify Me," which allows users to receive calendar and meeting notifications on their smart phones or email. It is the County's intent to transition GWMA meeting, agenda and summary communications to the new program in 2016.

Contracts and Interlocal Agreements

On November 17, 2015, the Interagency Agreement between Ecology and Yakima County (IAA No. C1600074) was amended to affirm the deliverables and due dates for the Lower Yakima Valley GWMA program.

On December 8, 2015, Yakima County entered into agreement with Pacific Groundwater Group (PGG) for the design of an ambient groundwater monitoring system for the Lower Yakima Valley GWMA.

In October agreements for High Risk Well Assessment Phase II radio advertising were signed with Bustos Media, Radio Yakima, Radio KDNA, and Townsquare Media.

The agreements are included as Attachment [B]

Attachment A

- Final GWAC meeting summary of August 20, 2015.
- Draft GWAC meeting summary of October 15, 2015.
- GWAC agenda, attendance roster record and public meeting notice for October 15, 2015.
- Education and Public Outreach (EPO) Working Group summary of October 7, 2015.
- Irrigated Ag Working Group (IAWG) summaries of October 13 and December 15, 2015.
- Data Collection, Characterization and Monitoring Working Group summaries of October 8, November 12 and December 10, 2015.
- Regulatory Framework Working Group summaries of October 14 and November 18, 2015.
- The Livestock/CAFO, Residential, Commercial, Industrial and Municipal (RCIM) and Funding Working Groups did not hold meetings in the fourth quarter.



1 YAKIMA VALLEY GROUNDWATER MANAGEMENT AREA ADVISORY COMMITTEE
2 (GWAC)

MEETING SUMMARY

4 Thursday, August 20, 2015 – 5:00 p.m. – 7:00 p.m.

*KDNA Conference Rooms 1 & 2
121 S. Sunnyside Ave., Granger, WA*

8 Note: This document is only a summary of issues and actions of this meeting. It is not intended to be
9 a transcription of the meeting, but an overview of points raised and responses from Yakima County
10 and Groundwater Advisory Committee members. It may not fully represent the ideas discussed or
11 opinions given. Examination of this document cannot equal or replace attendance.

12 I. Call to Order

13 Roll Call: This meeting was called to order at 5:00 p.m. by Jim Davenport, Facilitator.

Member	Seat	Present	Absent
Stuart Turner	Agronomist, Turner and Co.,	✓	
Chelsea Durfey			✓
Bud Rogers	Lower Valley Community Representative Position 1	✓	
Kathleen Rogers	Lower Valley Community Representative Position 1 (alternate)	✓	
Patricia Newhouse	Lower Valley Community Representative Position 2		✓
Sue Wedam	Lower Valley Community Representative Position 2 (alternate)	✓	
Doug Simpson	Irrigated Crop Producer	✓	
Jean Mendoza	Friends of Toppenish Creek	✓	
Eric Anderson	Friends of Toppenish Creek (alternate)		✓
Jan Whitefoot	Concerned Citizens of the Yakama Reservation		✓
Jim Dyjak	Concerned Citizens of the Yakama Reservation (alternate)	✓	
Steve George	Yakima County Farm Bureau	✓	
Frank Lyall	Yakima County Farm Bureau (alternate)	✓	
Jason Sheehan	Yakima Dairy Federation	✓	
Dan DeGroot	Yakima Dairy Federation (alternate)	✓	

Jim Trull	Roza-Sunnyside Joint Board of Control	✓	
Ron Cowin	Roza-Sunnyside Joint Board of Control (alternate)		✓
Laurie Crowe	South Yakima Conservation District	✓	
Jim Newhouse	South Yakima Conservation District (alternate)		✓
Robert Farrell	Port of Sunnyside	✓	
John Van Wingerden	Port of Sunnyside (alternate)		✓
Rand Elliott	Yakima County Board of Commissioners	✓	
Vern Redifer	Yakima County Board of Commissioners (alternate)	✓	
Ryan Ibach	Yakima Health District	✓	
Dr. Troy Peters	WSU Irrigated Agriculture Research and Extension Center	✓	
Bill Dunbar	U.S. Environmental Protection Agency	*✓	
Marie Jennings	U.S. Environmental Protection Agency (alternate)		✓
Elizabeth Sanchez	Yakama Nation		✓
Tom Ring	Yakama Nation (alternate)		✓
Kirk Cook	WA Department of Agriculture		✓
Virginia "Ginny" Prest	WA Department of Agriculture (alternate)	✓	
Andy Cervantes	WA Department of Health	✓	
Ginny Stern	WA Department of Health (alternate)		✓
Charlie McKinney	WA Department of Ecology	✓	
Tom Tebb	WA Department of Ecology (alternate)		✓
Lino Guerra	Hispanic Community Representative		✓
Rick Perez	Hispanic Community Representative (alternate)		✓
Jessica Black	Heritage University	✓	

*via phone

14 **II. Welcome & Meeting Overview**

15

16 Quorum was met.

17

18 Jim Davenport gave an overview of the agenda and informed the members that there
 19 would be an opportunity for the group to give their view on the GWAC such as how we are
 20 doing. He reminded the group to keep our success in mind while being courteous of each
 21 other.

22

Moment of Silence.

23 Introductions were made.

24

25 **III. Working Group Reports:**

26

27 **Data Working Group –**

28

29 No report.

30

31 **Livestock/CAFO Working Group – Charlie McKinney**

32 The last several meetings the Data and Livestock/CAFO groups met jointly to concentrate on
33 the Nitrogen Loading Assessment. Melanie Redding agreed to act as the data work group
34 chair due to Kirk stepping down. At the June 25, 2015 meeting, Melanie gave a presentation
35 to compare and describe lagoon leakages. Jean gave a presentation on lagoons and ponds,
36 proposing a matrix on the three different methods. The group generally agreed to use
37 Darcy's Law. At the July 9 meeting Kirk stepped down. The focus turned to potential
38 nitrogen loading. Methods of calculations and variables were discussed. South Yakima
39 Conservation District provided nitrogen concentration data from 35 different lagoons.
40 Moving forward, lagoon leakage and nitrogen rates are in the process of being calculated.
41 Three peer reviewers, Melanie Redding, Ginny Stern, and Kevin Lindsey, will review prior to
42 the data being presented to the committee. Meanwhile, the Department of Agriculture has
43 done an independent study on contribution from dairy pens and will supply that
44 information.

45 Charlie observed that once the necessary information from the Department of Ecology is
46 obtained, this process can be completed within two to three months.

47 A concern was expressed that neither advisory group members nor working group members
48 could act as impartial peer reviewers. While some agreed, most observed that the
49 reviewers have the appropriate credentials. It was also pointed out that the purpose of the
50 peer review is to show the appropriate actions were taken in gathering the information, not
51 to re-write the study.

52 **Irrigated Ag Working Group – Jim Trull**

53 Jim Trull reported that the group is working on best management practices for Irrigated
54 Agriculture, pairing lists down to ones that are specifically applicable to the Groundwater

55 Management Area and goals to address nitrogen. Practices fall into two categories:
56 Irrigation Water Management and Nutrient Management. The working group decided not
57 to pursue practices related to storage and handling of agricultural and animal byproducts.
58 Jim stated that the discussion centers on manure storage before applying to fields or
59 spreading, that the source is too small for investigations but they will apply the information.
60 The Livestock/CAFO group will address manure storage.

61 Regarding Irrigated Agriculture, best management practices are identified as codes which
62 are found on the web, these will eventually be attached to a report. Irrigation Water
63 Management is the practice of managing uniform water application to satisfy crop
64 requirements with amounts of water consistent with intake characteristics of the soil and its
65 moisture holding capacity. Within best management practice there are three levels: 1) the
66 'Check Book' method, where a producer monitors and reports irrigation and precipitation
67 weekly; 2) the check book method plus installing soil sensors; and 3) installing the soil and
68 moisture sensors with data transmitters.

69 The focus is on sprinkler and micro irrigation systems that are more suited on crops and
70 soils in our area and developing a plan with recommendations for methodology. In addition
71 to the proper design for an irrigation management system, growers should check nozzles,
72 and use common-sense actions to maintain the systems. Additionally, Micro-irrigation
73 systems include subsurface drip irrigation, regular drip or trickle emitters, and spray or
74 spinners. This practice can be part of a management system to support efficient application
75 of irrigation water and maintain soil moisture. Operation and maintenance is necessary to
76 ensure proper functions, including reference to periodic inspections and prompt repairs. Jim
77 observed that new technology is more efficient.

78 Jim reviewed nutrient management considerations: managing the amount, source,
79 placement, and timing of plant nutrients and soil amendments to minimize excess nitrates
80 reaching the groundwater resources; and to properly utilize manure, municipal and
81 industrial bio solids, and other organic by-products as plant nutrient sources. He added that
82 a nutrient management plan should be developed for nitrogen that considers crop
83 requirements for all potential sources of nutrients.

84 **Deep Soil Sampling.** Two rounds have been completed with a third sampling round to start
85 in about 30 days. The working group hopes for more participation; it has been noted that
86 there are not a lot of data sets to balance statistically.

87 Education and Public outreach is a companion program to Deep Soil Sampling, and Irrigation
88 and Nutrient BMPs. In summary, the working group hopes the GWAC will endorse a
89 reduced scope of Best Management Practices that applies to our Groundwater area.
90 Meanwhile, education and public outreach and post-harvest deep sampling needs to
91 continue.

92 **RCIM Working Group – Robert Farrell**

93 Robert Farrell reported that the group has been looking at nitrogen loading from residential,
94 commercial, and industrial sources while concentrating on residential lawns and hobby
95 farms. The recommendation for residential lawns by professional applicators is approximately
96 9 pounds of fertilizer per acre per year. Given that not everyone uses services or even
97 bothers with fertilizer they are recommending approximate loading one-tenth of that
98 amount. Another source suggests using two 20 pound bags of fertilizer which is two-thirds'
99 pound per acre per year from the average homeowner. Most hobby farms don't use any or
100 very little fertilizer.

101 Another member performed a survey in his neighborhood, from which he concluded his
102 neighbors use about 16 pounds per year of fertilizer. He stated that the nitrogen stays in the
103 clippings which his neighbors are removing.

104 **Education and Public Outreach (EPO) Working Group – Lisa Freund**

105
106 Lisa Freund presented that the Education and Public Outreach group would be doing the next
107 round of High Risk Well Assessment surveys. A few minor changes have been made to news
108 releases and letters to various people invited; however, they are using the same methodology
109 and messages as in the previous survey. The group is looking to begin surveying in September,
110 2015. Everyone is urged to participate if they're located in the GWMA area and on a private
111 or shared well. Those interested can contact Yakima County Public Services at (509) 574-2300.

112
113 **Regulatory Framework Working Group – Jean Mendoza**

114 Jean began her report by reading from WAC 173.100.100.

115 She summarized the group's 2015 work to date: In February the EPA and Department of
116 Ecology presented the laws. In April the Natural Resources Conservation presented on
117 Nitrates in the Water. In June Laurie Crowe with South Yakima Conservation District
118 presented an overview of the Conservation Districts while Ginny Prest from the Department

119 of Agriculture presented the Dairy Nutrient Management Program. Moving forward, the
120 Department of Ecology will present on CAFO, non-point, and underground injection wells.
121 At this point the Regulatory Framework group is in the data gathering mode.
122

123 **IV. Authorization for Deep Soil Sampling Data Analysis – Jim Trull**

124 Jim Trull asked for GWAC authorization to develop a scope of work and estimated cost for
125 Landau and Associates to analyze the first three Deep Soil Sampling data sets (fall 2014,
126 spring 2015 and fall 2015). He explained that Landau Associates had analyzed the first set of
127 Deep Soil Sampling results and had made a presentation to the Irrigated Agriculture group.
128 The group came to consensus to wait for three data sets before conducting further analysis.
129 Vern explained the contracting process, noting that developing the scope of work and
130 identifying associated fees was the first step. If the GWAC agrees to the scope of work, then
131 the County will enter into negotiations with the contractor. Subject to successful
132 negotiations, the contract would go before the Board of County Commissioners for final
133 approval.

134 Laurie asked if the contract could be an addendum to the existing Deep Soil Sampling Plan.
135 Vern said it could, subject to discussion by this group. Jim Trull restated the proposal, asking
136 for GWAC approval to develop the scope of work, to include a range of what they think the
137 work should cost, and to deliver the scope of work to Vern, Laurie and the GWAC.

138 Jim Davenport asked if the group supported Jim's proposal (yes). He asked if there were any
139 outliers (no).

140 *Authorization to develop a scope of work for Deep Soil Sampling Data Analysis approved by*
141 *consensus.*

142 A member stated he has the right to know what's in the contract. He would appreciate it if,
143 before releasing to commissioners, the group sees the document.

144

145 **V. Committee Business**

146 **Notice of Procedures for Work Group Meetings – Lisa Freund**

147 Working group meeting practices are to include anyone who wants to be included.
148 Yakima County Administration makes sure the meeting groups are informed of new
149 information and meeting dates. Admin works with the chair to identify meeting dates

150 and calendar the meetings. Anyone who has expressed interested in a working group or
151 has attended a meeting, whether GWAC members or not, are included in the invitation.
152 The meeting information is also posted on the website with dates, times, location, and
153 the call in number. The group was asked if this procedure is acceptable, no one
154 disagreed. The group was reminded to check the website for meeting schedules.

155 **Approve the April 16 and June 18, 2015 meeting summaries**

156 The April 16 and June 18, 2015 meeting summaries were approved as presented.

157 **VI. GWAC Member Comments**

158

159 The group was asked, "How are we doing?"

160 The majority of the group members felt that the working groups are in a good place for
161 productivity, our charge is specific and we need to stay focused on the original goal. The
162 groups are settling down, members are listening to each other with less arguing and simply
163 trying to get things done. With such a large and diverse group the committee structure has
164 improved, comments are useful and respected. The public outreach has increased
165 significantly. A few members expressed this process to be like a train, we are heading down
166 the tracks, but there are a lot of people who want to conduct, both speeding us up and
167 slowing us down. Most also agreed that more participation is needed in Deep Soil Sampling.
168 A few members stated they appreciate the work but fear we will not accomplish anything.
169 Overall, it seems that the groups are making more progress now than they have in the last
170 three years.

171 A member asked for a narrative or presentation ahead of time when a proposal needs
172 authorization.

173 **VII. Public Comment**

174

175 An advocate for the Hispanic community questioned whether we had a representative for
176 Hispanic Farmers. She was informed that we do have a Hispanic Community Representative.
177 She stated that her dad is a farmer with high Nitrates in his well however it took her a lot of
178 time to finally get our information.

179

180 Another member of the public suggested that our GWAC group will lack credibility with
181 farmers unless they've actually been one. He believes the makeup of our groups are heavily
182 leaning towards agriculture and until we find the truth of where nitrates are coming from
183 we will never come up with an answer.

184

185 **VIII. Next Meeting:**

186

187 • October 15, 2015 5:00 PM

188 Location: Radio KDWA, 121 Sunnyside Ave, Granger, WA 98932

189

190 **IX. Next Steps**

191

192 IAWG will develop a scope of work and cost range for Deep Soil Sampling analysis.

193

194 **X. 2015 Meeting Calendar**

195

196 December 17, 2015 (tentative, if needed)

197

198 The meeting was adjourned at 7:04 p.m.

199

200 Meeting summary approved by the GWAC on October 15, 2015.

201

1 **YAKIMA VALLEY GROUNDWATER MANAGEMENT AREA ADVISORY COMMITTEE**
 2 **(GWAC)**

3 **MEETING SUMMARY**

4 **Thursday, October 15, 2015 – 5:00 p.m. – 7:00 p.m.**

5 *Denny Blaine Boardroom*
 6 *810 East Custer Ave., Sunnyside, WA*
 7

8 *Note: This document is only a summary of issues and actions of this meeting. It is not intended to be*
 9 *a transcription of the meeting, but an overview of points raised and responses from Yakima County*
 10 *and Groundwater Advisory Committee members. It may not fully represent the ideas discussed or*
 11 *opinions given. Examination of this document cannot equal or replace attendance.*

12 **I. Call to Order**

13 **Roll Call:** The meeting was called to order at 5:00 p.m. by Jim Davenport, Facilitator.

Member	Seat	Present	Absent
Stuart Turner	Agronomist, Turner and Co.,	✓	
Chelsea Durfey			✓
Bud Rogers	Lower Valley Community Representative Position 1	✓	
Kathleen Rogers	Lower Valley Community Representative Position 1 (alternate)	✓	
Patricia Newhouse	Lower Valley Community Representative Position 2	✓	
Sue Wedam	Lower Valley Community Representative Position 2 (alternate)	✓	
Doug Simpson	Irrigated Crop Producer	✓	
Jean Mendoza	Friends of Toppenish Creek	✓	
Eric Anderson	Friends of Toppenish Creek (alternate)		✓
Jan Whitefoot	Concerned Citizens of the Yakama Reservation		✓
Jim Dyjak	Concerned Citizens of the Yakama Reservation (alternate)		✓
Steve George	Yakima County Farm Bureau	✓	
Frank Lyall	Yakima County Farm Bureau (alternate)		✓
Jason Sheehan	Yakima Dairy Federation	✓	
Dan DeGroot	Yakima Dairy Federation (alternate)	✓	

Jim Trull	Roza-Sunnyside Joint Board of Control	✓	
Ron Cowin	Roza-Sunnyside Joint Board of Control (alternate)		✓
Laurie Crowe	South Yakima Conservation District		✓
Jim Newhouse	South Yakima Conservation District (alternate)		✓
Robert Farrell	Port of Sunnyside	✓	
John Van Wingerden	Port of Sunnyside (alternate)		✓
Rand Elliott	Yakima County Board of Commissioners	✓	
Vern Redifer	Yakima County Board of Commissioners (alternate)	✓	
Ryan Ibach	Yakima Health District		✓
Dr. Troy Peters	WSU Irrigated Agriculture Research and Extension Center		✓
Lucy Edmondson	U.S. Environmental Protection Agency	✓	
Marie Jennings	U.S. Environmental Protection Agency (alternate)		✓
Elizabeth Sanchez	Yakama Nation		✓
Tom Ring	Yakama Nation (alternate)		✓
Kirk Cook	WA Department of Agriculture		✓
Virginia "Ginny" Prest	WA Department of Agriculture (alternate)	✓	
Andy Cervantes	WA Department of Health		✓
Ginny Stern	WA Department of Health (alternate)	✓	
Charlie McKinney	WA Department of Ecology	✓	
Sage Park	WA Department of Ecology		✓
Lino Guerra	Hispanic Community Representative	✓	
Rick Perez	Hispanic Community Representative (alternate)		✓
Jessica Black	Heritage University		✓

*via phone

14 **II. Welcome & Meeting Overview**

15
16 Facilitator Jim Davenport called the meeting to order at 5:00 pm.
17 Moment of Silence.
18 Charlie McKinney introduced new member Lucy Edmondson, Director of EPA Region 10.
19 She is replacing Tom Eaton, who retired. He also stated that Kirk Cook has accepted a
20 position in Bend Oregon and will be replaced by Ginny Prest as the Department of
21 Agriculture primary representative. Jaclyn Hancock will serve as alternate. General
22 introductions followed.

23

24 **III. Working Group Reports:**

25

26 **Data Collection Working Group – Melanie Redding, Chair**

27

28 Melanie stated that Data Collection shares the GWAC's goal to reduce nitrates concentrations
29 in the groundwater below the state drinking water standards. Their objective is to collect data
30 and monitor, identify problems, conclude measures to reduce groundwater contamination,
31 and educate. She explained the Nitrogen Loading Assessment, describing the relative sources
32 and where it is taking place.

33

34 **Ambient Monitoring Program.** The group is working with Steve Swope of Pacific
35 Groundwater Group (PGG) on the initial scope of work (design and selection) for the
36 installation of monitoring wells. The draft of the scope should be available for comment in
37 the next few weeks.

38

39 PGG is designing a separate study focusing on hot spots, trends and how they can support
40 other Ambient Groundwater Monitoring Programs; this work is still in the early stages.

41

42 Melanie continued that Kirk Cook, the Department of AG former lead, has accepted another
43 position. Others from AG and Yakima County have stepped up to assist in his absence. She
44 introduced Perry Beale, Department of AG, who is working on this project. Perry explained
45 that he is trying to set the "typical use rate" and apply that standard number for each crop
46 type.

47

48 The draft report Nitrogen Loading Assessment is due on October 16. It will be sent to the Data
49 Collection group for review before being forwarded to the GWAC. A final product is
50 anticipated in April 2016.

51

52 **Livestock/CAFO Working Group – Charlie McKinney**

53

54 No Report

55

56 **Irrigated Ag Working Group – Jim Trull**

57

58 The third round of deep soil sampling is underway at approximately 60 different fields. The
59 group has spent time reviewing data. They have had good discussions but not a lot of

Groundwater Management Area (GWMA):

The purpose of the GWMA is to reduce nitrate contamination concentrations in groundwater below state drinking water standards

60 conclusions can be drawn due to limited number of sample sites and in some cases
61 incomplete data from those sample sites. Samples can only be gained from those farmers
62 willing to participate.

63

64 The group is working on a spreadsheet containing a listing of crops in the GWMA by acreage;
65 crop yield; nitrogen removed in the harvested crop; nitrogen consumed in plant growth; and
66 nitrogen from all sources applied to grow the crop. The group is not sure of the use of the
67 project yet—it could be input to the Nitrogen Loading Assessment for Irrigated Agriculture
68 work or it could be used for validating the numbers in the Nitrogen Loading Assessment. For
69 now, the group is just collecting information.

70

71 RCIM Working Group – Robert Farrell

72

73 The best estimate of maximum nitrogen loading is 55 to 60 pounds per acre per year. The
74 group determined that Yakima County should provide the work group with an estimate of
75 the number of residential parcels in the GWMA with an area of between 2 and 10 acres that
76 may be hobby farms. This information is requested to help resolve if the use of a sliding
77 scale of nitrogen loading, based upon area of the hobby farm, is appropriate.

78

79 There are two large septic systems in Yakima County which are regulated by the
80 Department of Health, both are located in the GWMA. A septic system over 3,500 gallons is
81 considered to be a large septic system.

82

83 RCIM would like to take the information received from the well assessment surveying and
84 revisit each location with high nitrates looking at different uses of the property and/or
85 neighboring properties such as lawns, pastures, and drain fields on hobby farms.

86

87 Regulatory Framework Working Group – Jean Mendoza

88

89 Washington State has been operating without a CAFO General Permit. The State is trying to
90 find the best pathway to complete the National Pollutant Discharge Elimination Systems
91 (NPDES) permit update. The plan is to have a permit by June 2016.

92

93 The Yakima County Planning Division gave a presentation to the Regulatory group on the
94 SEPA and critical area's processes. There are exemptions and regulations to the Growth

95 Management Act through these processes. It will be several months of work before the
96 group is ready to present data to the GWAC.

97

98 **Education and Public Outreach (EPO) Working Group – Lisa Freund**

99

100 **High Risk Well Assessment Survey Phase II.** The contract with the Yakima Health District to
101 conduct the well assessment surveying and sampling was approved by the County
102 Commissioners on September 8, 2015. A 900 piece direct mail campaign to households in
103 the GWMA was sent the same week inviting participation. The EPO has received 24
104 completed surveys and sampling results from the Yakima Health District. A total of 90
105 households in the GWMA have expressed interest in having their wells tested. EPO has
106 noticed a smoother process this time around: the survey instrument is cleaner and the
107 health district has a lot of experience conducting the surveys. The contract with the Health
108 District is for 200 completed surveys by February 2016. The group anticipates meeting that
109 goal.

110

111 Yakima County's website has a new look and in conjunction with that the GWMA website
112 has undergone several changes. The GWAC resource lists were evaluated and it was
113 determined many had no hits and others had dead links. EPO will be asking GWAC to scale
114 down the resource list.

115

116 Jim asked Lisa to clarify "a dead link," and she explained it is a link that is no longer
117 connected to a site or document: when the user clicks on it, they receive an error notice
118 that the document or website cannot be reached.

119

120 Lisa provided instructions on how to access the new web page. She also explained that the
121 new program has options for users to receive automatic notifications to their smart phone or
122 email when a calendar, agenda or meeting summary has been posted. There is also an option
123 to unsubscribe at any time. The County will still be providing the GWAC with updates via e-
124 mail but plans to transition into the new system in early 2016.

125

126 **IV. Procedure for consideration of USGS proposal for presentation – Jim Davenport**

127

128 Jim Davenport distributed a letter from Dr. Matt Bachmann of USGS that he received recently.
129 The letter noted that USGS will issue a press release next week (week of October 19)
130 announcing its report on the particle tracking analysis model and explaining the results of this

131 work to the public. Matt offered to present the report to the GWAC and obtain its input on
132 how to determine the optimal locations for manure applications.

133
134 After discussion, a suggestion was made to table the conversation until the report came out
135 and was reviewed by the Data Collection working group. After Data Collection reviews the
136 report, it will be discussed by the GWAC. There were no objections to proceeding with the
137 suggestion.

138
139 Jim will respond to Matt with the GWAC's decision.

140
141 **V. Committee Business**

142 The committee approved the August 20, 2015 meeting summary as presented.

143
144 The group was asked if they wanted to keep the optional December 17 meeting on the
145 calendar. The group agreed to keep it on the calendar noting it can be cancelled if there are
146 insufficient agenda items for a meeting.

147
148 **VI. Public Comment**

149 A GWAC alternate pointed out that the Denny Blaine Board Room is a very convenient
150 location to hold the GWAC bi-monthly meetings. Lisa pointed out that the room has no phone
151 access. The group took a vote and decided they would like Lisa to check on the room's
152 availability in 2016 and book as many GWAC meeting dates as possible at the facility.

153
154 **VII. Next Meeting:**

- Thursday, December 17, 2015 5:00 PM
155 Location: Radio KDNA, 121 Sunnyside Ave, Granger, WA 98932

156
157
158
159 **VIII. Next Steps**

160
161 The meeting was adjourned at 6:41 p.m.

162
163 Meeting summary approved by the GWAC on _____.

Meeting Time and Location

Thursday, October 15, 5:00 p.m. – 7:00 p.m.

Denny Blaine Boardroom
 810 East Custer Ave.
 Sunnyside, WA 98944

Regular GWAC Meeting

Time	Topic	
5:00 – 5:10 p.m.	Welcome, Meeting Overview and Introductions: <ul style="list-style-type: none"> • New Committee Members • Other committee members • Others attending the meeting 	Jim Davenport, Facilitator
5:10 – 6:00 p.m.	Working Group Reports <ul style="list-style-type: none"> • Data Collection – Nitrogen Loading Assessment Status • Livestock/CAFO (no report) • IAWG • RCIM • Regulatory Framework • EPO 	Melanie Redding Charlie McKinney Jim Trull Bob Farrell Jean Mendoza Lisa Freund
6:00 – 6:10 p.m.	Procedure for consideration of USGS proposal for presentation	Jim Davenport
6:10 – 6:40 p.m.	Comments/Open Forum	
6:40 – 6:50 p.m.	Committee Business	Approve August 20 meeting summary Future GWAC Meeting Notices December meeting decision
6:50 – 6:55 p.m.	Public Comment	
7:00 p.m.	Adjourn	

Next Meeting: Thursday, December 17, 2015 (TBD)

Committee Members

Stuart Turner, agronomist, Chelsea Durfey (alternate)	Turner and Co.
Bud Rogers, Kathleen Rogers (alternate)	Lower Valley Community Representative Position 1
Patricia Newhouse, Sue Wedam (alternate)	Lower Valley Community Representative Position 2
Doug Simpson	Irrigated Crop Producer
Dr. Jessica Black	Heritage University
Jean Mendoza, Eric Anderson (alternate)	Friends of Toppenish Creek
Jan Whitefoot, Jim Dyjak (alternate)	Concerned Citizens of the Yakama Reservation
Steve George, Frank Lyall (alternate)	Yakima County Farm Bureau
Jason Sheehan, Dan DeGroot (alternate)	Yakima Dairy Federation
Jim Trull, Ron Cowin (alternate)	Sunnyside-Roza Joint Board of Control
Laurie Crowe, Jim Newhouse (alternate)	South Yakima Conservation District
Robert Farrell, John Van Wingerden (alternate)	Port of Sunnyside
Rand Elliott, Vern Redifer (alternate)	Yakima County Commission
Ryan Ibach	Yakima Health District
Dr. Troy Peters	WSU Irrigated Agriculture Research and Extension Center
Lucy Edmondson, Marie Jennings (alternate)	U.S. Environmental Protection Agency
Elizabeth Sanchez, Tom Ring (alternate)	Yakama Nation
Kirk Cook, Virginia "Ginny" Prest (alternate)	Washington Department of Agriculture
Andy Cervantes, Ginny Stern (alternate)	Washington Department of Health
Charlie McKinney, Sage Park (alternate)	Washington Department of Ecology
Lino Guerra, Rick Perez (alternate)	Hispanic Community Representative

Committee Ground Rules:

- Come to committee meetings prepared

Groundwater Management Area (GWMA):

The purpose of the GWMA is to reduce nitrate contamination concentrations in groundwater below state drinking water standards

- Treat one another with civility
- Respect each other's perspectives
- Listen actively
- Participate actively
- Honor time frames
- Silence electronic devices during meetings
- Speak from interests, not positions.

2015 Meeting Dates:

February 19
April 16

June 18
August 20

October 15
December 17 (TBD)

Meeting Materials:

Name	Date Provided	From
2015_0820_GWAC_DraftMeetingSummary	8/27/15 and 10/8/15	lisa.freund@co.yakima.wa.us
Meeting Agenda	10/8/15	lisa.freund@co.yakima.wa.us
Data Collection Working Group Report of September 10, 2015	10/8/15	lisa.freund@co.yakima.wa.us
EPO Working Group Report of September 9, 2015	10/8/15	lisa.freund@co.yakima.wa.us
IAWG Working Group Report of September 17, 2015	10/8/15	lisa.freund@co.yakima.wa.us
RCIM Working Group Report of September 24, 2015	10/8/15	lisa.freund@co.yakima.wa.us
Regulatory Framework Working Group Reports of August 12 and September 9, 2015	10/8/15	lisa.freund@co.yakima.wa.us
Sign-up instructions for "Notify Me" (Meeting and Agenda Notifications)	10/8/15	lisa.freund@co.yakima.wa.us

GWAC Attendance Roster

Member	15-Oct-2015
Stuart Turner	Present
Chelsea Durfey	Absent
Bud Rogers	Present
Kathleen Rogers	Present
Patricia Newhouse	Present
Sue Wedam	Present
Doug Simpson	Present
Jean Mendoza	Present
Eric Anderson	Absent
Jan Whitefoot	Absent
Jim Dyjak	Absent
Steve George	Present
Frank Lyall	Absent
Jason Sheehan	Present
Dan DeGroot	Present
Jim Trull	Present
Ron Cowin	Absent
Laurie Crowe	Absent
Jim Newhouse	Absent
Robert Farrell	Present
John Van Wingerden	Absent
Rand Elliott	Present
Vern Redifer	Present
Ryan Ibach	Absent
Dr. Troy Peters	Absent
Lucy Edmondson	Present
Marie Jennings	Absent
Elizabeth Sanchez	Absent
Tom Ring	Absent
Virginia "Ginny" Prest	Present
Andy Cervantes	Absent
Ginny Stern	Present
Charlie McKinney	Present
Sage Park	Absent
Lino Guerra	Present
Rick Perez	Absent
Jessica Black	Absent

Affidavit of Publication

STATE OF WASHINGTON
COUNTY OF YAKIMA SS

Roger Harnack, being first duly sworn on oath deposes and says that he is the Publisher of the DAILY SUN NEWS, a daily newspaper.

That said newspaper is a legal newspaper and it is now and has been for more than six months prior to the date of publications hereinafter referred to, published in the English language continually as a daily newspaper in the city of Sunnyside, YAKIMA County, Washington, and it is now and during all of said time printed in an office maintained at the aforesaid place of publication of said newspaper, and that the said Daily Sun News was on the 4th Day of April, 1969 approved as a legal newspaper by the Superior Court of said Yakima County.

That the annexed is a true copy of a LEGAL PUBLICATION -
Yakima County Public Services
Groundwater Mtg 10-15-15
published in regular issues (and not in supplemental forms) of said newspaper once each week for a period of 1 consecutive issue(s) commencing 10/08/15 and ending on 10/08/15, both dates inclusive, and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is the sum of \$ 33.75, amount has been paid in full, at the rate of \$7.50 per column inch per insertion.

Notice of Public Meeting
Lower Yakima Valley Groundwater
Advisory Committee

NOTICE IS HEREBY GIVEN that Yakima County is holding a public meeting of the Lower Yakima Valley Groundwater Advisory Committee on Thursday, October 15, 2015 at 5:00 PM at the Dehny Blaine Boardroom, 810 East Custer Ave., Sunnyside, WA 98944 pursuant to Chapter 173-100-080 WAC Ground Water Management Areas and Programs.

For Additional Information
To learn more about the Lower Yakima Valley Groundwater Management Area, the Groundwater Advisory Committee, and its goals and objectives, please see the Lower Yakima Valley Groundwater Management Area on the County webpage at: <http://www.yakimacounty.us/gwma/>

For more information about the meeting, please contact Lisa Freund, Yakima County Public Services Administrative Manager at 574-2300.

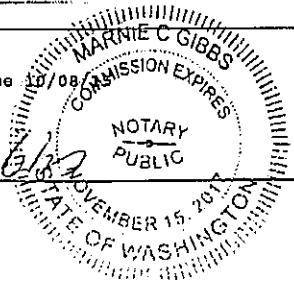
Dated this Wed, October 7, 2015

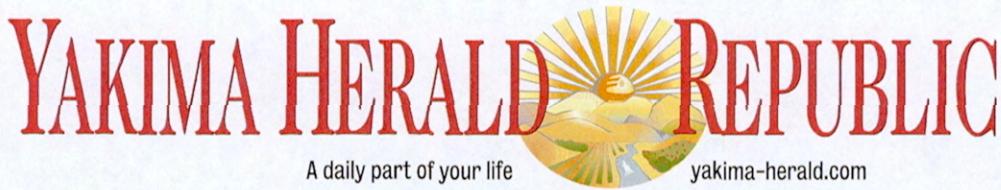
PUBLISH: DAILY SUN NEWS

October 8, 2015

Subscribed and sworn to before me 10/08/2015

Notary Public in and for
the State of Washington
030110-00000





Ad Proof

Yakima County

Notice of Public Meeting
Lower Yakima Valley
Groundwater Advisory
Committee

NOTICE IS HEREBY GIVEN
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a public meeting of the Lower
Yakima Valley Groundwater
Advisory Committee on Thursday, October 15, 2015 at
5:00 PM at the Denny Blaine
Boardroom, 810 East Custer
Ave., Sunnyside, WA 98944
pursuant to Chapter 173-100-
080 WAC Ground Water Man-
agement Areas and Programs.

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Lower Yakima Valley Ground-
water Management Area,
the Groundwater Advisory
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objectives, please see the
Lower Yakima Valley Ground-
water Management Area on
the County webpage at: <http://www.yakimacounty.us/gwma/>

For more information about the
meeting, please contact Lisa
Freund, Yakima County Public
Services Administrative Man-
ager at 574-2300.
Dated this Wednesday, Octo-
ber 7, 2015

(587832) October 8, 2015

This is the proof of your ad scheduled to run on the
dates indicated below.

Please confirm placement prior to deadline,
by contacting your
account rep at (509) 577-7740.

Date:	10/07/15
Account #:	110536
Company Name:	YAKIMA COUNTY SURFACE WATER MANAGEMENT
Contact:	Tina Beck,AP
Address:	128 NORTH 2ND STREET ROOM 408 YAKIMA, WA 98901
Telephone:	(509) 574-2343

Run Dates:
Yakima Herald-Republic 10/08/15
YakimaHerald.com 10/08/15

Ad ID:	587832
Start:	10/08/15
Stop:	10/08/15
Total Cost:	\$70.40
# of Inserts:	2
Lines:	41.0
Ad Class:	6021
Ad Class Name:	Legal Notices
Account Rep:	Simon Sizer
Phone #	(509) 577-7740
Email:	ssizer@yakimaherald.com

[Education and Public Outreach]

Charge from Groundwater Management Area Advisory Committee

Working Group Members

Andres Cervantes (GWAC-DOH), Jean Mendoza (GWAC-Friends of Toppenish Creek), Elizabeth Torres (Citizen), Gretchen Stewart (EPA), Nieves Negrete (Citizen), Patricia Newhouse (GWAC-Citizen Rep Position #2), Dean Effler (Citizen), Joye Redfield-Wilder (Ecology), Stuart Turner (GWAC-Turner & Co), Ignacio Marquez (AGR);) Jessica Black (GWAC); Lisa Freund (Yakima County-Chair)

Meetings/Calls Dates

Meeting: Wednesday, October 7, 2015 from 1:30 p.m. to 3:30 p.m.

Participants

Lisa Freund (Chair-Yakima County), Andres Cervantes (GWAC), Patricia Newhouse (GWAC), *Jessica Black (GWAC), Ignacio Marquez (AGR), Gretchen Stewart (EPA), Jim Davenport, and Lee Murdock (Yakima County)

*Via phone

Key Discussion Points

Civic Plus Website -Lee Murdock

Lee introduced the County's new Civic Plus website and guided the group through the GWMA content structure. She explained the "Notify Me" module that allows the public to choose which meetings they want to be notified of and which meeting agendas they would like to receive. The question was asked how the "notify me" option was better than the current system of email notifications. Lee replied that it is more economical (less staff time and money) and empowering for users. Lisa added that the County will not go live with the GWMA notification system until 2016, and will provide the GWAC, working group members and interested parties several email notifications before going live with the new system.

It was suggested that printed instructions be provided to the GWAC at its October 15 meeting in addition to the email reminders of the new system.

Definitions and Comments. Lee said she had added text to define the GWAC, the GWMA and the GWMA program. The working groups have been kept to one page, and the "comments" section moved from the main page to the working group page.

Resources. Lee explained that she streamlined the multiple-link resource list to a smaller list. It was asked if there was a cost to the old, extensive multiple links list. Lee responded yes, that our

site may be considered a “link farm” and search engines will lower our ranking. Broken links also damage the site’s reputation; maintaining them requires considerable staff time and resources. Lisa asked the group if they preferred to dedicate GWMA funds to maintenance of the old links. The group said “no.”

Lee added that she had reviewed the history of the number of hits to the resources page; most were rarely—if ever—accessed.

EPO Recommendations to the GWAC:

Accept the proposed streamlined **Resource** list. If GWAC members want links added back to the list, take the request to the GWAC for its consideration.

Keep the links to other GWMA’s, organized by state.

ACTIONS:

Provide written “notify me” instructions with the GWAC’s October 15 handouts. (Lisa)

Policy request: Add a County disclaimer to the Google Translator feature. (Lee)

Add “What Is the Lower Yakima Valley GWMA Program?” to the FAQ list. (Lisa)

- Provide GWMA Program text to Lisa (Jim Davenport)

Update draft text with approved GWAC messaging. (Lisa)

High Risk Well Assessment Survey – Lisa Freund

Lisa reported that four weeks into the outreach schedule, the Health District has received 90 requests for well testing. 24 surveys and samples have been completed. The majority of requests were in response to the direct mail piece (10% response rate). Several people had heard about the offer through a newspaper, and others learned about it from family or friends.

Lisa added that she had two interviews in response to the news release: KNDO TV and KIT radio.

Ignacio reported that Spanish and English radio advertising (Bustos Media, Radio KDNA, ESPN Deportes, Buena non-profit station and Former Townsquare) will begin this week. He is working with Radio KDNA to schedule talk show time. Andy Cervantes will also participate.

It was suggested that a satisfied customer “testimonial” during the KDNA radio show might have more impact with the Hispanic community. Feedback from the Health District indicated that the Hispanic population is reluctant to participate, fearing a sales pitch or citation. Receiving the message from a trusted source might be more effective.

ACTION:

Lisa will work with Jessica Black to identify a potential testimonial candidate.

Flyer Distribution. The flyer distribution list was reviewed and updated.

Nuestra Casa and the Consent Order Boundary. Nuestra Casa is under contract to reach out to households within the consent order boundary to offer well sampling and treatment systems. Nuestra Casa is also distributing well assessment flyers on behalf of the GWAC.

Question: is this a potential conflict of interest? The GWAC was instructed by the EPA to respect the consent boundaries and not conduct any outreach or sampling within the boundaries. If Nuestra Casa distributes our flyers to people within the consent boundaries, or makes them available at their office, is this a conflict.

Jim Davenport asked who had said we could not conduct GWAC outreach within the consent boundaries. Answer: EPA (Tom Eaton). Gretchen Stewart will follow up to identify if this is still accurate information.

ACTION:

Gretchen Stewart will contact Eric Winiecki for clarification of EPA's edict.

Prevention Campaign 2015 - Gretchen Stewart

The ad hoc group met today to discuss messaging, target audiences and timeline. They will create a draft outline and present it to the EPO at its December 2 meeting.

Resources Requested

- None

Recommendations for GWAC

- Website "Resources": adopt the shorter resources list. If GWAC members have requested "add backs," bring the requests to the GWAC for its consideration and approval.

Deliverables/Products Status

- As of October 5, 2015, 90 households have contacted the Yakima Health District to participate in the High Risk Well Assessment Survey Phase II. 24 surveys have been completed. English/Spanish radio ads launched. Flyer distribution to continue.

Proposed Next Steps

- Next EPO meeting: Wednesday, November 4, 2015 Yakima County Courthouse Rm 419.
Time: TBD

Proposed Agenda

1. Well Assessment Outreach feedback & next steps
2. [Placeholder] Civic Plus website Updates
3. December 2 Placeholder: Ad Hoc Draft Marketing Plan and Timeline

Irrigated Ag Working Group (IAWG)

Charge from Groundwater Management Area Advisory Committee

Working Group Members

Jim Trull (GWAC-Roza-Sunnyside Joint Board of Control), Bob Stevens (interested party) Bud Rogers (GWAC-Citizen), Chelsea Durfey (GWAC), Dan McCarty (interested party), Dave Cowan (interested party), Dave Fraser (Interested Party - Simplot Agronomist), Donald Jameson (interested party), Doug Simpson (GWAC-Farmer), Frank Lyall (GWAC-Farm Bureau), Ginny Prest (GWAC-Dept. of Ag), Jean Mendoza (GWAC-Friends of Toppenish Creek), Jim Newhouse (GWAC), Kevin Lindsey (interested party), Kirk Cook (GWAC-WSDA), Laurie Crowe (GWAC-South Yakima Conservation District), Melanie Redding (Ecology), Mike Shuttleworth (interested party), Ralph Fisher (EPA), Ron Cowin (GWAC-SVID), Scott Stephen (interested party), Stuart Turner (GWAC-Turner & Co.), Tom Tebb (GWAC-Department of Ecology), Rosario Brambila (interested party), Dr. Troy Peters (GWAC-WSU); Vern Redifer, Jim Davenport.

Meetings/Calls Dates

Meeting: Sunnyside Valley Irrigation District Office, 120 S. Eleventh Street, Sunnyside

When: September 17, 2015 from 1:00 pm to 3:00 pm.

Call: (509) 574-2353 – Pin # 2353

Participants

Jim Trull (Chair), Anthony Dorsett, Dan McCarty, Doug Simpson, Frank Lyall, James Rivard, Jean Mendoza, Jim Davenport, Kathleen Rogers, Perry Beale, and Greta Smith (Yakima County)

*via telephone

Key Discussion Points

1. Report on Fall Deep Soil Sampling (DSS).

Laurie C. was not able to attend this meeting, so the report of the DSS has been postponed. Jim T. did state that DDS have started and 60 participants are expected.

2. Discussion and response to questions and observation on first two round of Deep Soil Sampling.

Jean M. reviewed her take on the sample information which has been provided to date. Her list of questions, which were specific to sample number, was reviewed and discussed with the group. Jean was able to note some areas of questionable data which will need to be looked into. Since

Laurie was unable to attend the meeting some of the questions were left for her to respond to as well.

In addition, Jean had concerns that some of the representative samples are not useful, not a fair representative and that we need to be careful of the samples taken because we need to use the money wisely.

Jim T. stated that he felt that it is very unlikely there will be a statistically valid number of samples across the whole range of parameters the samples have been received on a voluntary bases. The IAWG will still be able to learn from the information they are receiving and since the process has started, it is too late to change the process.

Many members in attendance felt that the sampling process is providing information not previously available. Now a baseline can be established that is specific to the GWMA area. It is gathered strictly on a volunteer basis.

Jean expressed her concerns with concerns with quantitative versus qualitative data. She suggested that a statistician review the numbers.

A member mentioned his concerns with targeting crops and how we could potentially lose credibility with farmers if that is done.

Jim T. stated that he feels with the samples received it shows that many farmers are doing the things right and that with the data received the opportunity for education and incentives will be able to help those who need it.

3. Review of Revised Spreadsheet for Nitrogen Loading

Jim T. reported that there is not much data at this time to report on. He did make the suggested changes to the spreadsheet. The word typical was added to the heading of column 4. He added a new column which is titled "nitrogen update in plant in growing cycle". Another new column was added, "Nitrogen Uptake in Plant Growing Cycle". In the areas where the column fields are blank, he is still waiting data to enter there. The numbers for acres still need to be tweaked. Jim T. would still like to hear from anyone who has any numbers to add or change for any of these columns for him so he can update and make more accurate. The updated spreadsheet is attached to this meeting summary.

4. Other Business

Meeting was adjourned at 2:00 pm.

Resources Requested

- N/A

Recommendations for GWAC

- N/A

Deliverables/Products Status

Proposed Next Steps

Irrigated Ag Working Group (IAWG)

Charge from Groundwater Management Area Advisory Committee

Working Group Members

Jim Trull (GWAC-Roza-Sunnyside Joint Board of Control), Bob Stevens (interested party) Bud Rogers (GWAC-Citizen), Chelsea Durfey (GWAC), Dan McCarty (interested party), Dave Cowan (interested party), Dave Fraser (Interested Party - Simplot Agronomist), Donald Jameson (interested party), Doug Simpson (GWAC-Farmer), Frank Lyall (GWAC-Farm Bureau), Ginny Prest (GWAC-Dept. of Ag), Jean Mendoza (GWAC-Friends of Toppenish Creek), Jim Newhouse (GWAC), Kevin Lindsey (interested party), Kirk Cook (GWAC-WSDA), Laurie Crowe (GWAC-South Yakima Conservation District), Melanie Redding (Ecology), Mike Shuttleworth (interested party), Ralph Fisher (EPA), Ron Cowin (GWAC-SVID), Scott Stephen (interested party), Stuart Turner (GWAC-Turner & Co.), Tom Tebb (GWAC-Department of Ecology), Rosario Brambila (interested party), Dr. Troy Peters (GWAC-WSU); Vern Redifer, Jim Davenport.

Meetings/Calls Dates

Meeting: Sunnyside Valley Irrigation District Office, 120 S. Eleventh Street, Sunnyside

When: December 15, 2015 from 1:30 pm to 3:30 pm.

Call: (509) 574-2353 – Pin # 2353

Participants

Jim Trull (Chair), Jim Davenport, Troy Peters, Scott Stephen, Kathleen Rogers, Doug Simpson, Frank Lyall, Jean Mendoza, Larry Fendell, Jim Dyjak, Ginny Prest*, Laurie Crowe*, Ralph Fisher *, Bobbie Brady, Chris Saunders (Yakima County support staff)

*via telephone

Key Discussion Points

Review the Results of the Third Round of Deep Soil Sampling

Jim Trull opened the meeting and began by providing a chart prepared by Laurie Crowe with information gathered thus far on the third round of deep soil samples. Laurie explained that the results have not yet been tabulated. All of the data and questionnaires have been sent to Yakima County and they are processing it now. Deep soil samples were procured from 60 participating locations. Retakes were taken on three from this go around to verify accuracy. These retakes are not called repeats as they are done in the same field, different spots. Upon inquiry, Laurie affirmed that the retakes were taken in the same soil type and same crop. Two of the retakes resulted in lower numbers and one

was the same. Sandier soils tended to show higher numbers in terms of nitrates, suggesting the need for better nutrient management plans, for example, more effective use of existing water supplies.

Members discussed the information that was received. Trends can already be extracted from the information received and volunteer participants were making note of the results and inquiring as to how to make changes that would bring about improvement.

Jim reminded the group that by the time they meet again the results of the third round of deep soil sampling will have been tabulated.

Finalize the Discussion on Jean's Questions/Comments on the First Two Rounds of Sampling

Concerns were raised about the deep soil sampling as it pertained to cost, the requirements of the plan, data review, work load, and number of fields utilized to procure samples. Jim Trull and Jim Davenport asked the group to give their opinion as to the concerns that were voiced. They were as follows:

1. Every field made available for screening on a volunteer basis was screened. More fields were screened than were required by the plan. We cannot require people to participate and we cannot forcibly enter their land and take soil samples in order to achieve statistical validity. Moreover, we cannot arbitrarily decide what fields to sample as that would not constitute a scientific sampling either. Nevertheless, the information that has been procured is valuable and does provide evidence in many categories because it portrays what the landscape looks like now and gives valuable opportunities to learn.
2. The group was aware of the limitations of the study when it began because they knew permission was required to access the fields in order to obtain samples. While this might limit our sampling range it does not limit how we can handle data analysis. Much information can be gleaned. Projects change mid-way as different variables are encountered. We have reported to the GWAC throughout the process and they are aware of any limitations that might exist.
3. There is a sense that education is occurring during this process and people are changing practices and learning in their use of manure and commercial fertilizer. The activities of GWAC are causing greater awareness of the problem in the Lower Valley and more and more people are caring about what's going on. Farmers are participating, talking, learning, sharing and looking for assistance to change what

they were doing when it is needed. All of these things are indicators of success and are accomplishing our stated goals.

4. News will spread as we continue to work on the plan and we can use what we have learned to influence future practices.
5. Peers in the field have discussed GWMA more in the last two years than in the last 50 years of farming. People want to know if they can do something better and are willing to invest in it.
6. The work of the IAWG group is only a part of the total work being done. The GWAC goals do not rest on this group.

Jim Trull reminded the group again that not all of the soil sampling and analysis is completed. We can't project outcomes until all of the data is in. Conclusions shouldn't be drawn until we are done with the deep soil sampling.

Dr. Troy Peters volunteered to work with the data once all of the testing has been finalized and logged in. He desires to analyze it and write it up for scientific review. He believes it would be useful for a lot of people in broader application and many things can be concluded from the information that is being received.

Discussion on Nutrient Balance

Jim Trull learned at this week's Data Collection group meeting that the Department of Agriculture (WSDA) (who is handling the irrigated agriculture portion of the nitrogen loading spreadsheet) expect to have their work done at the end of January and present their report to the peer committee for review. In anticipation of that report, it was Jim's desire that the group be prepared by looking at their own numbers which could serve as a useful reference point. He distributed a spreadsheet he had prepared with the help of several of the group's members entitled "Estimate of Nitrogen Usage for Agricultural Production in the GWMA." In addition, he asked Scott Stephen from Agrimanagement, Inc., to review the chart. Scott's responses appear in several columns throughout the spreadsheet and are printed in red. Jim further advised that the spreadsheet was not yet complete. Jim Davenport thought it was good to have this information in advance of the report from the Department of Agriculture as the working group would then have a good picture of what is happening. Scott advised that there is lots of range in this information as it varies between crops – field to field – grower to grower – and is a bit broad. Scott said that if we had a program to reduce nitrogen this information would help us focus in on a crop with opportunities for improvement. Discussion ensued among the group members as to the information contained in the spreadsheet in order to better

understand its meaning. Jim Trull again reiterated that the spreadsheet was not complete, but is meant to help the group prepare in advance of the information that will come from the Department of Agriculture (WSDA) early in 2016.

Other Issues

A member pointed out that the deep soil sampling plan required the group to look at best management practices. Jim Trull agreed but advised that there would be further opportunity to look at best management practices after the deep soil sampling was completed and Troy Peters' report was done. At that time the group would address best management practices and recommend those that should be applied. A member further inquired wanting to know if the group was going to use data to evaluate the effectiveness of best management practices. Jim did not believe it was the group's job to see if the best management practices worked, but rather to recommend their application. Another member noted that they were comfortable with best management practices as they were derived from years of experience and written up by the scientific community. Jim affirmed again that it is not the group's job to evaluate best management practices, rather to say here are some best management practices that we think will help. Again he noted the subject will be reviewed after the deep soil sampling has been complete and Troy Peters' report was done.

Meeting adjourned at 2:50pm.

Resources Requested

- N/A

Recommendations for GWAC

- N/A

Deliverables/Products Status

Proposed Next Steps

Data Collection, Characterization, Monitoring

Charge from Groundwater Management Area Advisory Committee

A discussion of timelines and details regarding the Nitrate Loading Assessment

Working Group Members

Melanie Redding (Chair); Andres Cervantes; Bob Stevens; Charles Ellingson; Charlie McKinney; Chelsea Durfey; Dave Cowan; Doug Simpson; Elizabeth Sanchez; Frank Lyall; Ginny Stern; Jaclyn Hancock; Jan Whitefoot; Jean Mendoza, Jim Trull; John Van Wingerden, Kevin Lindsey; Laurie Crowe; Lino Guerra; Kirk Cook; Mike Shuttleworth; Ralph Fisher; Robert Farrell; Ron Cowin, Scott Stephen; Steve Swope; Stuart Turner; Thomas Tebb; Dr. Troy Peters

Meetings/Calls Dates

Meeting: Thursday, October 08, 2015 10:00am

Call Number: 509-574-2353 pin: 2353#

Participants

Present: Melanie Redding (Chair)*, Ginny Stern*, Steve Swope*, Pony Ellingson*, Kevin Lindsey*, Steve George, Jim Trull, Jim Davenport, Jean Mendoza, Vern Redifer, Lee Murdock, and Erica Naasz (Yakima County Support Staff)

*via phone

Key Discussion Points

Update on the Ambient Groundwater Monitoring Program

At the February 19, 2015 GWAC meeting the group discussed and approved the Data Working Group to develop an Ambient Groundwater Monitoring Program. Steve Swope with PGG is working with Melanie and the County on the initial scope of work which includes the design and selecting phase. The latest proposed scope of work allows for design of monitoring well system, identification of well locations and some installation of the wells, depending upon funds available, based upon recommended prioritization criteria.

The draft of the scope of work should be available for comment in the next few weeks.

Update on the Nitrogen Loading Assessment

The Department of Agriculture is the County's lead contractor on this effort. The draft report is due from Kirk, of the Department of Agriculture, on October 16, 2015. It will be reviewed, sent to the Data Work Group for review, and then sent to the GWAC for review. Melanie will provide handouts for the GWAC members stating the list of sources and timeline for this report.

It was discussed whether Kirk would be finishing up this process or if he would be replaced. It is very important that members know how this is to be managed. Melanie will update the GWAC with this information at the GWAC Meeting.

USGS

An agenda item for the GWAC meeting will be presented regarding the appropriate process for considering further USGS presentations.

Resources Requested

-

Recommendations for GWAC

-

Deliverables/Products Status

-

Proposed Next Steps

- Next Meeting: Thursday, November 12, 2015 at the Yakima County Courthouse from 10am to noon.

Data Collection, Characterization, Monitoring

Charge from Groundwater Management Area Advisory Committee

A discussion of timelines and details regarding the Nitrate Loading Assessment

Working Group Members

Melanie Redding (Chair); Andres Cervantes; Bill Dunbar; Bob Stevens; Charles Ellingson; Charlie McKinney; Chelsea Durfey; Dave Cowan; Donald Brown; Doug Simpson; Elizabeth Sanchez; Eric Winiecki; Frank Lyall; Ginny Stern; Jaclyn Hancock; Jan Whitefoot; Jean Mendoza, Jennifer MacDonald; Jim Trull; John Van Wingerden, Kevin Lindsey; Laurie Crowe; Lino Guerra; Kirk Cook; Mike Shuttleworth; Ralph Fisher; René Fuentes; Robert Farrell; Ron Cowin, Scott Stephen; Sheila Fleming; Steve Swope; Stuart Turner; Thomas Tebb; Dr. Troy Peters

Meetings/Calls Dates

Meeting: Thursday, November 12, 2015 10:00am

Call Number: 509-574-2353 pin: 2353#

Participants

Present: Melanie Redding (Chair)*, Ginny Stern*, Jim Davenport*, Kevin Lindsey, Steve George, Perry Beale, Jean Mendoza, Vern Redifer, Lee Murdock, Bobbie Brady, Chris Saunders, and Erica Naasz (Yakima County Support Staff)

*via phone

Key Discussion Points

Update on the Nitrogen Loading Assessment

Melanie briefed the group on the progress of the draft report. Kirk Cook had taken on the job of consolidating all the information from the various groups. With Kirk's impending departure, three different groups have taken up different aspects of the report. WSDA is handling irrigated agriculture; Yakima County GIS is handling residential/commercial/industrial/municipal; and livestock has already been written up in draft form by Kirk, still to be peer-reviewed. The goal is to have the peer review complete by the end of November, and the final draft report available for review by the GWAC and its working groups by the first of the year.

The group began a discussion about the details going into the draft report. Melanie stressed that the loading surveys were not meant to be comprehensive, but as a guide for how farmers/landowners have been doing in the past year. How people are to use this information is still being considered in the preparation of the report.

A group member raised concerns that a survey which relied on anonymous nitrogen users for information, not conducted under public meetings laws, would not be trusted by many interested members of the community. Melanie stated that the purpose of the assessment is designed to give a look at the breakdown of nitrate levels by sector, not specific information for each site. Vern elaborated that the point of the survey is to find normalized typical use by geography in the Lower Valley.

A group member asked about the status of the hobby farm question. It is scheduled for discussion at the next RCIM meeting. They have compiled data from septic systems, and will be working on discharge from larger industries. The management of the survey is under Department of Health control. They are still trying to develop a typical size methodology for residential lawns. The Fall 2015 deep soil sampling surveys and lab results have been received by the County, which is in the process of entering the data.

Update on the Ambient Groundwater Monitoring Program

At the February 19, 2015 GWAC meeting the group discussed and approved the Data Working Group to develop an Ambient Groundwater Monitoring Program. Steve Swope with PGG is working with Melanie and the County on the initial scope of work which includes the design and selecting phase. The County will be asking PGG to design the monitoring system and work with the County in prioritizing the well-drilling, because the GWMA will not have sufficient money to get everything up and running immediately. There may be resources available to augment funding on hand, but it will need to be sought out. Guidance is being sought on how many wells are needed to come up with a viable sample.

USGS Particle Tracking Model

Ginny Stern offered the group a preliminary assessment of the recently-released USGS nitrate-tracking model. The USGS took existing EPA data, and used a time-step application to estimate nitrate travel times based on flow data from 1959 to September, 2001. The model also incorporated specific sites, and came up with a general hypothesis. Eighty-six percent of nitrates fall under the 42-year timeframe, according to the model. There were no big surprises in terms of the model's conclusions on flow direction. The median figures were 13,000 feet underground, with a median travel time of five years over three miles. More information about the USGS peer-review process should be available for discussion at the next meeting. Ginny indicated that the model raised no red flags, and doesn't appear to be in duplication of, or damaging to GWAC's work.

Members of the group expressed concerns about some of the assumptions in the USGS model. Their hydrology assumptions for all areas were the same, and there may not be sufficient attention given to margin of error in assuming nitrate travel paths. Ginny stated that the tracking methods were different than typical uncertainty models, in following particles from point to point.

Another member of the group expressed concerns about the 2001 end date, and whether changes in farming and irrigation practices in the last 14 years had been taken into account. Ginny stated that the model is valuable in helping the group know where to track, so our work can be

compared with their model. She again stressed that nothing in the report suggested the GWAC should change what it's doing in terms of data collection.

Another member of the group asked whether the USGS has talked about refining its model. Ginny stated that 1,000 square feet is their base. While it would theoretically be possible to use a smaller base, it would mean either making an even larger number of assumptions, or else spending a large amount of time and money to gather specifics, with no guarantee it would lead to better answers. Nitrogen loading assessments are not necessarily better or worse than what the USGS has put forth, but the most important aspect for the GWAC is to be able to have a more informed discussion about nitrate contamination and solutions.

The intent at this point is to take into account concerns from members of the group, and present a summary, either oral or in writing, to all members of the GWAC. Jim Davenport and Vern Redifer agreed that the group should be briefed on the contents of the report, while trying to avoid a debate over it before all the nitrogen loading data is available. Jim informed the group that he would be in contact Matt Bachmann with the USGS as to the status of their report with the GWAC.

Resources Requested

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Recommendations for GWAC

•

Deliverables/Products Status

•

Proposed Next Steps

•

Data Collection, Characterization, Monitoring

Charge from Groundwater Management Area Advisory Committee

A discussion of timelines and details regarding the Nitrate Loading Assessment

Working Group Members

Melanie Redding (Chair); Andres Cervantes; Bill Dunbar; Bob Stevens; Charles Ellingson; Charlie McKinney; Chelsea Durfey; Dave Cowan; Donald Brown; Doug Simpson; Elizabeth Sanchez; Eric Winiecki; Frank Lyall; Ginny Stern; Jaclyn Hancock; Jan Whitefoot; Jean Mendoza, Jennifer MacDonald; Jim Trull; John Van Wingerden, Kevin Lindsey; Laurie Crowe; Lino Guerra; Kirk Cook; Mike Shuttleworth; Ralph Fisher; René Fuentes; Robert Farrell; Ron Cowin, Scott Stephen; Sheila Fleming; Steve Swope; Stuart Turner; Thomas Tebb; Dr. Troy Peters

Meetings/Calls Dates

Meeting: Thursday, December 10, 2015 10:00am

Call Number: 509-574-2353 pin: 2353#

Participants

Present: Melanie Redding (Chair)*, Ginny Stern*, Jean Mendoza*, Laurie Crowe*, Jim Davenport, Steve George, Jim Trull, Vern Redifer, Lee Murdock, Bobbie Brady and Chris Saunders (Yakima County Support Staff)

*via phone

Key Discussion Points

Update on the Nitrogen Loading Assessment

Melanie updated the group on the status of the various components of nitrogen loading assessments. The Department of Agriculture (WSDA) is still handling irrigated agriculture. Yakima County GIS is still handling residential/commercial/industrial/municipal (RCIM). Kirk Cook is still handling livestock/CAFOs. The Livestock/CAFO data and loading assessment have been delivered to the peer reviewers (Melanie, Ginny Stern, and Nancy Darling). They hope to have their work completed by end of January 2016. The work will then be returned to Kirk Cook for editing as required. The Irrigated Agriculture work, being done by Perry Beale and Kelly McLain at Department of Agriculture, should be ready to deliver to peer review by the end of January 2016. The RCIM work being done by Yakima County GIS should also be ready for submission to peer review by end of January 2016.

A member of the group asked for a definition of “land application sites,” which are included in the irrigated agriculture component of the nitrogen loading assessment. WSDA has an annual

process where they map which crops are being planted on which fields. They will be attempting to create an estimate of nitrogen being applied to fields based on each crop.

Melanie asked for clarification on the difference between manure lagoons and ponds. Ponds are not built to treat manure. They're temporary storage sites which settle any solids in the manure before transferring to the main storage pond. While the size of ponds vary depending on the operation, a typical pond is usually sloped, five feet deep, with a width about three times their depth. The level of manure stored in a five-foot deep pond would typically be four feet. Typical settling times vary, as the liquid component is constantly moving from one storage basin to another. Steve George offered a tour of a manure processing operation, which was deemed agreeable.

Update on the Ambient Groundwater Monitoring Program

Vern reported that Yakima County has signed a contract with Pacific Groundwater Group (PGG) to design an ambient groundwater monitoring system for the Lower Yakima Valley Groundwater Management Area. PGG will start work immediately and will update the County of their progress from time to time. The contract amount is \$37,500. PGG will propose the optimum number and location of monitoring wells. They will take the testing data we have and data gathered by others and will propose a number of sites and locations. They will work with the County so that these will be located in public right-of-way areas or on public property. They will also recommend a set of surface water stations that could be monitored in concert with recommended groundwater well locations. These will reflect shallow groundwater conditions during non-irrigation seasons so these statistics variables might be factored in as well.

Once PGG recommends a list of locations and number of sites the sites will be prioritized to accommodate the current available funding on hand to accomplish this task. For instance, if PGG recommends 40 sites and we have funding for 10, we will work together with PGG to determine which sites are a priority and they will direct us as to where to start. This information will be provided to Yakima County and will be shared with the Data Working Group. PGG will participate in two Data Working Group meetings and receive direction from this group.

A member asked about the drain and surface water quality testing. Vern said they would be measuring water for nitrate concentrations during non-irrigation seasons to determine a baseline.

A member noted that the Irrigation District has been doing drain monitoring already and wondered if we could get information from them so that we are not duplicating efforts. This information would help distinguish how the nitrates are moving around via surface water and might be influencing nitrogen levels. A member asked Jim Trull if he knew if the Irrigation District's testing was robust enough to help us. Jim said that his opinion was probably not on the testing for nitrates, but that PGG might have a better estimate.

USGS

Melanie informed the group that Ginny Stern would be present at the upcoming December 17th GWAC meeting to brief the group on the contents of the October USGS report.

Resources Requested

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Recommendations for GWAC

-

Deliverables/Products Status

- Nitrogen loading assessments expected to be ready for peer review by the end of January.

Proposed Next Steps

- Check to see if Irrigation Districts' surface water testing is robust enough to be helpful in designing ambient groundwater monitoring program.

Regulatory Framework Working Group

Charge from Groundwater Management Area Advisory Committee

[Insert Charge]

Working Group Members

Jean Mendoza, Chair (Friends of Toppenish Creek), Andres Cervantes (Department of Health), Charlie McKinney (Department of Ecology), Chelsea Durfey (Turner and Co.), Dan DeGroot (Yakima Dairy Federation), David Newhouse (interested party), Ginny Prest (WSDA), Jason Sheehan (Yakima Dairy Federation), Jim Dyjak (Concerned Citizen of Yakama Reservation), Larry Fendell (interested party), Laurie Crowe (South Yakima Conservation District), Nick Peak (EPA), Patricia Newhouse (Lower Valley Community Representative), Steve George (Yakima County Farm Bureau), Stuart Crane (Yakama Nation), Sue Wedam (Lower Valley Community Representative), Vern Redifer (Yakima County Public Services), Jim Davenport (Yakima County Public Services)

Meetings/Calls Dates

Meeting: October 14, 2015 2:00pm – 4:30pm

Call Number: 509-574-2353 PIN #2353

Participants

Present: Jean Mendoza (Chair), Virginia "Ginny" Prest, Patricia Newhouse, Larry Fendell, Jim Dyjak, Vern Redifer, Jim Davenport, Tommy Carroll, Jason Earles, Lynn Deitrick, Stuart Crane, Charlie McKinney, Steve George, Lee Murdock, and Erica Naasz (Yakima County Support)

*via phone

Key Discussion Points

Goals and Objectives

Jean discussed a few goals and objectives that potentially need to be studied by the Regulatory group before completing an analysis. It was determined that the group would wait to discuss the EPA's directions to Washington State regarding the new Human Health Criterion rule for toxics until the state finishes development of the law. The group will, however, consider studying Environmental Justice, Regulations, and policies from other states. A few members expressed confusion over the definition of Environmental Justice. EPA's website states the definition as, Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, culture, national origin, income, and educational levels with respect to the development, implementation, and enforcement of protective environmental laws, regulations, and policies.

The members were asked to start thinking about how they would prefer to start the analyzing process and bring those ideas to the November Regulatory meeting.

Planning for Future Analysis/Yakima County Ordinances – Yakima County Staff – Lynn Deitrick, Tommy Carroll, and Jason Earles

Growth Management Act 36.70A

By the 1980's the Washington State legislature found that uncoordinated and unplanned growth, together with a lack of common goals expressing the public's interest in the conservation and the wise use of our lands, pose a threat to the environment, sustainable economic development, and the health, safety, and high quality of life enjoyed by residents of this state. As a result, the legislature in 1990 adopted the Growth Management Act (GMA) which established state goals, set deadlines for compliance, and offered direction on how Yakima County must prepare its comprehensive plan and development regulations and requirements for early and continuous public participation. The GMA requires Yakima County to manage the County's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, rural areas, preparing comprehensive plans and implementing them through capital investments and development regulations. Comprehensive Plans must comply with the goals and requirements for the elements that must be included and the process used to prepare and adopt comprehensive plans.

Comprehensive Plan Development

The goals of this plan are to maintain and enhance productive agricultural lands and discourage used that are incompatible with farming activities. One example, Natural resource industries, requires Yakima County to maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

Part of this plan involves, Map Development. The process is as follows; 1) to generally meet the criteria for agricultural resource lands of long-term commercial significance as defined by state laws and regulations. 2) Lands historically zoned Exclusive Agricultural or General Agricultural (Pre-GMA Zoning). 3) Lands located within an irrigation district and receiving water, or 4) Lands where dryland farming, pasture or grazing outside of irrigation districts is predominant. 5) Lands enrolled in one of the current use assessment programs. 6) Lands located outside established Urban Growth Areas.

Yakima County Development Regulations

Title 19.11.010 – Resource and Rural Districts provides the following development regulations regarding Agriculture: Official Zoning Map, Allowable Land Use Table, Lot Size Requirements, Setbacks, Lot Coverage, Building Heights, Special Provisions, Special Land Use Standards, and General and Specific Land Use Standards.

Title 16A & 16C – Critical Areas Ordinance (CAO) only applies to Agricultural Uses and Activities. Title 16A addresses Stream Corridors, Flood Hazard Areas, and Wetlands. Title 16C addresses

Stream Corridors, Flood Hazard Areas, Wetlands, Fish and Wildlife Habitat, Geologic Hazardous Areas, Critical Aquifer Recharge Areas (CARAS), and Upland Wildlife Habitat Conservation Areas.

Due to the Voluntary Stewardship Program (VSP), Yakima County has two CAO's. The VSP is a new approach for counties to participate in a watershed-based, collaborative stewardship planning process. VSP uses incentives to promote agricultural and environmental stewardship. The program passed into Washington law in 2011 as the result of an ongoing effort to advance common goals for environmental protection and agricultural viability using regulation as a last resort.

Title 16A - This CAO would apply (if critical areas are present) to new or existing Agricultural developments applying for land use approval in Yakima County.

Title 16C - This CAO would not apply (if critical areas are present) to new or existing Agricultural developments applying for land use approval in Yakima County.

The intent of the Critical Aquifer Recharge Areas Chapter is to preserve, protect and conserve Yakima County's CARAs from contamination, to establish a protection approach that emphasizes the use of existing laws and regulations, and minimizes the use of new regulations.

State Environmental Policy Act (SEPA); the State Environmental Policy Act provides a way to identify possible environmental impacts that may result from governmental decisions on both public and private projects. These decisions may be related to issuing permits for private projects, constructing public facilities, or adopting regulations, policies, or plans. SEPA environmental review is required for any state or local agency decision that meets the definition of an "action" and is not categorically exempt. Actions are divided into two categories, "project actions" and "non-project actions".

When the presenters were asked, "which regulation impacts the protection of groundwater the most?" They answered with, SEPA. SEPA fills the voids in regulations and gives opportunity to draw in other agencies with special expertise.

Aquifer Protection Area

Vern stated that in RCW 36.36 this provides the County Commissioners to attempt to create an Aquifer Protection Area. This would allow the Aquifer Protection Area to finance the protection of groundwater areas. You could be charged fees if your well is withdrawing water from an aquifer or if your septic is discharging to an aquifer. However, the County can only create the Aquifer Protection Area by a vote from the people in such areas.

Resources Requested

-

Recommendations for GWAC

-

Deliverables/Products Status

-

Proposed Next Steps

- Next meeting: November 18, 2015. Time and place to be determined.

Regulatory Framework Working Group

Charge from Groundwater Management Area Advisory Committee

[Insert Charge]

Working Group Members

Jean Mendoza, Chair (Friends of Toppenish Creek), Andres Cervantes (Department of Health), Charlie McKinney (Department of Ecology), Chelsea Durfey (Turner and Co.), Dan DeGroot (Yakima Dairy Federation), David Newhouse (interested party), Ginny Prest (WSDA), Jason Sheehan (Yakima Dairy Federation), Jim Dyjak (Concerned Citizen of Yakama Reservation), Larry Fendell (interested party), Laurie Crowe (South Yakima Conservation District), Nick Peak (EPA), Patricia Newhouse (Lower Valley Community Representative), Steve George (Yakima County Farm Bureau), Stuart Crane (Yakama Nation), Sue Wedam (Lower Valley Community Representative), Vern Redifer (Yakima County Public Services), Jim Davenport (Yakima County Public Services)

Meetings/Calls Dates

Meeting: November 18, 2015 5:00pm – 7:30pm

Call Number: 509-574-2353 PIN #2353

Participants

Present: Jim Davenport (Substitute Chair), Laurie Crowe, Sue Wedam, Patricia Newhouse, David Newhouse, Jason Sheehan, Larry Fendell, Jim Dyjak, Stuart Crane, Charlie McKinney, Steve George, Vern Redifer, Tommy Carroll, Lynn Deitrick, Bobbie Brady, Chris Saunders, and Erica Naasz (Yakima County Support)

*via phone

Key Discussion Points

Jean Mendoza was unable to attend the meeting due to illness. Jim Davenport agreed to chair the meeting.

Yakima County Regulatory Authority and Processes Concerning Groundwater and Agricultural Activities – Yakima County Staff – Lynn Deitrick and Tommy Carroll

- 1) How does Yakima County determine when an Environmental Impact Statement (EIS) is needed?

Vern Redifer began with an explanation of the State Environmental Policy Act (SEPA), which contains thresholds relating to the size and nature of the proposed development. The first step is to fill out an Environmental Checklist. The County consults with agencies with environmental expertise to help identify potential environmental impacts. They will wind up issuing a

determination of significance (DS), a determination of non-significance (DNS), or a mitigated determination of non-significance (MDNS). A DS can lead to an EIS. It's rare for this process to end up requiring an EIS, since most of the time there is a way to mitigate environmental impacts associated with proposed projects. In those cases where an EIS is determined to be appropriate, the lead agency takes charge of it.

Jim Davenport added that SEPA does not apply to ongoing activities or operations, but only to some type of proposed expansion of activities that would require a permit.

A member of the group inquired about the recent State Supreme Court ruling in *Foster v. Ecology*, concerning a determination of non-significance by the Department of Ecology (DOE) on a water project. The case in question concerned a dispute over whether a determination of "overriding and compelling public interest" was sufficient to trump senior water rights. The Court ruled that it was not, and senior water rights hold precedence, except in cases of immediate emergency. The ruling is not germane to the GWMA's work.

- 2) Does Yakima County address potential groundwater and groundwater flow to surface water when evaluating an EIS?

Yes, sometimes, when applicable. Yakima County relies on comments from agencies with environmental expertise to identify potential issues with groundwater flow, among others.

- 3) Since over application of manures and fertilizers is now considered solid waste how will this impact Yakima County's mandate to protect the environment?

Yakima County relies on the Department of Agriculture (WSDA) and the local Conservation Districts to monitor compliance with nutrient management plans.

The premises of the question – that manures and fertilizers are now considered solid waste, and that Yakima County has a mandate to protect the environment – were disputed. The ruling in this year's dairy case affected only those dairies named in the suit. Changes in state and/or federal law regarding the classification of manure/fertilizer would require legislative action. Vern and Lynn agreed they were not aware of a "mandate" to protect the environment.

A member of the group asked whether the County looks at the nutrient management plans directly. The County relies on the Conservation Districts to do so.

- 4) Please elaborate on ways that Yakima County addresses mitigation (WAC 197-11-350 Mitigated DNS)

The County issues an MDNS when best management practices are available to reduce significant adverse environmental impacts to non-significant levels. During the SEPA comment period, neighboring property owners will often express concerns. Applicants will then be required to hire a consultant to determine the appropriate mitigation measures.

- 5) The WA Department of Ecology maintains an online SEPA register that describes approval of applications in the state. Projects and results for Yakima County are available at <https://fortress.wa.gov/ecy/separ/Register>ShowRegisterTable.aspx> Please tell us why

some projects applied for SEPA approval and others did not, especially with respect to confined animal feeding operations.

A new confined animal feeding operation (CAFO) would be required to go through the SEPA process. If it's an existing CAFO, most do not, but it depends on the size and scope of what the CAFO wants to do, and whether their proposed activity was covered under a prior SEPA review.

- 6) Please explain Exemptions 197-11-850 Department of Agriculture. How does this impact regulatory actions in Yakima County, especially with respect to lagoons and ponds?

WSDA actions regarding feedlots are not exempt from SEPA review. However, due to language in WAC 197-11-932, the county or city in which the project is located becomes the lead agency, not WSDA. When it comes to feedlots, most of the time Yakima County becomes the lead agency.

- 7) WAC 197-11-920 Agencies with Environmental Expertise says that the following agencies have expertise in the management of solid and hazardous waste – DOE, Dept. of Fish and Wildlife, and DOH. What are the implications in light of the recent court ruling that manure applied above agronomic rates is solid waste?

Yakima County relies on the WSDA and local Conservation Districts to monitor compliance with nutrient management plans. As the group discussed earlier, the ruling in this year's dairy case did not affect the legal definition of manure, so there would be no implications regarding these agencies' authority in regulating manure. The Resource Conservation and Recovery Act (RCRA) is the relevant federal law regarding management of hazardous and non-hazardous solid waste.

A member of the group asked whether being designated an "Agency with Environmental Expertise" conferred any extra powers on those agencies. In this case, DOE consults with the lead agency, Yakima County, on issues like groundwater and solid waste. Since the agencies with expertise know this is the only opportunity they'll have to offer input that could affect the final determination of the lead agency, they usually make the most of it.

- 8) WAC 197-11-960 Environmental checklist states

b. Ground:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

This would appear to apply to lagoons and ponds. Please tell us how you evaluate EIS's for these structures.

When Yakima County receives an Environmental Checklist on a proposed project, it would have to lead to a determination of significance before an EIS could be triggered. After an initial EIS scoping process, the County, presuming it's the lead agency, then takes comments from agencies with expertise and from neighboring property owners. Their comments are evaluated. If the applicant's mitigation measures are deemed inadequate, then alternative measures must be adopted, or the project could be denied.

Specifically in relation to manure lagoons or ponds, possible mitigation efforts would include lining the ponds and having a groundwater monitoring program put in place. If the monitoring program finds water quality parameters are being exceeded, the applicant would be required to remedy the problem according to DOE/EPA standards.

A member of the group asked which section of the cited WAC would apply to lagoons and ponds. In Jean's absence, Vern thought it would be Section 2. The SEPA review process was revisited. As a practical example, if an existing dairy operation wanted to relin their ponds, no review would be required. If a dairy operation wanted to add a new pond, a review could be triggered if the pond was big enough. A review of a pond or lagoon could also be triggered if evidence were brought forth that a lining was leaking, and such evidence was deemed to have merit upon examination. Oftentimes applicants will be informed of comments and asked for a response.

- 9) It is important for us to understand how Yakima County implements both 16A Critical Areas and 16C Critical Areas. Both codes are described as "*Critical Areas Ordinance of Yakima County, Washington.*" Can you clarify?

Title 16A is a Critical Areas Ordinance (CAO) drafted in 1995 that applies only to agricultural activities. After the legislature intervened with the Voluntary Stewardship Program, Title 16C was drafted in 2007, which applies to all non-agricultural activities.

NOTE: In the course of the discussion, Questions 10 and 11 were inadvertently skipped over. The answers given below were not discussed at the meeting. They are quoted from County Planning Staff's written notes for the sake of having a complete record.

- 10) When a rule does not apply to any structure that was in place prior to enactment of the Critical Areas Ordinance, which date applies, 1995 or 2007?

When a structure is first constructed it is regulated under the CAO in effect at that time. If the structure is modified then that modification is subject to the CAO in effect at that time.

- 11) Please describe the overlap between critical areas, critical aquifer recharge areas and shorelines.

The GMA requires Yakima County to protect critical areas, including CARAs. Our updated CAO (16C) regulates CARAs, but establishes a protection approach that uses existing laws and regulations to protect them, and minimizes the use of new regulations. The SMA doesn't require protection, per se, but since they are critical areas and the CAO and SMP were once combined, they are included in the SMP.

- 12) Is there still a hold on applying critical areas regulations to agricultural activities? SSB 5248 expired on Dec. 1, 2011.

Title 16C defers to 16A for all agricultural activities. See 16C.01.05(3). SSB 5248 remains in effect.

- 13) Is there any effort to extend the voluntary stewardship program to the lower valley? If there is no voluntary remediation and no regulation what does this mean for that area?

The Voluntary Stewardship Program applies countywide, including the Lower Valley. Chelan and Thurston were pilot counties, but it will take a couple of years to complete the plan. The VSP is not geared towards the improvement of groundwater quality, but to prevent further harm.

- 14) Who regulates subsurface drains?

This used to be regulated by elected Drainage Improvement Districts, most of which have disbanded over the years as people stopped filing for election. Discussion ensued on whether Roza and SVID have jurisdiction in this area. Given some uncertainty among members of the group, it was thought a good idea to take the question to the IAWG Work Group.

- 15) Who decides if it is acceptable to place a lagoon adjacent to an irrigation canal?

Irrigation canals are not like streams, so the CAO doesn't apply. As long as the lagoon is out of the Right of Way, and affected property owners aren't opposed, there are no regulations to prohibit such placement of a lagoon. A member of the group stated that nobody is proposing to locate a manure lagoon next to an irrigation canal, nor is there any intention to.

- 16) Why are there lagoons in critical areas? How did this happen?

Probably because they were placed prior to the applicable CAO review process and grandfathered in. New lagoons are not permitted in critical areas under Title 16C. The relevant sections of the County Code in this regard are 16C.06.10(2), and 16D.06.10(2).

- 17) Does Yakima County have any way to prevent over-application of manures and fertilizers to cropland?

No. Regulation of manures and fertilizers is covered under the nutrient management plans, which are overseen by WSDA and the local Conservation Districts.

Jim Davenport stated that this was really the ultimate question here. If the County doesn't have a way to prevent over-application, should or shouldn't it? It's a question that implicates all agricultural operations, not just dairies. It also leads into the final question on the list:

- 18) What would it take to pass an ordinance in Yakima County similar to Franklin County Ordinance 17.10.020 that prohibits more than two dairies with > 1,300 cows in a two mile buffer?

https://www.municode.com/library/wa/franklin_county/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.10APAGPRZO

County Planning Staff walked through the process of drafting an ordinance. The Board of County Commissioners (BOCC) would have to vote to initiate such a change. Then a work program would need to be developed. Then a draft text would be issued for public comment. Then the County would conduct a SEPA review on the draft text. The resulting proposed ordinance would be presented to County Planning Commission in public hearing. The Planning Commission would make a recommendation yea or nay and pass the proposed ordinance on to the BOCC. The BOCC would hold a public hearing, take public testimony, debate the issue, and hold a vote. If a majority of commissioners vote in favor, the ordinance would take effect.

The group discussed whether the GWMA should issue a recommendation on whether an ordinance concerning over-application of manure should be added to the County Code. County staff cautioned that any ordinance would need to contain very specific language, since the application of manure and fertilizer is common in all agricultural activities, not just dairies; and it would also require money to effectively enforce it. Vern suggested that a public education campaign might be the better approach.

A member believed it was important to know where we are at with manure/fertilizer application rates because they have changed over time. Jim Davenport asked if there was a way to document this. A member replied yes, hopefully we will see it documented in the loading assessment, some through the work of others, and some through dairy soil testing. He also was assured that as we moved forward with GWMA the soil testing would be a bigger component. He was encouraged that changes were taking place – changes for the better.

Meeting adjourned at 6:45pm.

Resources Requested

-

Recommendations for GWAC

-

Deliverables/Products Status

-

Proposed Next Steps

- Next meeting: Time and place to be determined.
- Contact IAWG Work Group about regulation of subsurface drains.

Attachment B

- Amended Interagency Agreement between The Department of Ecology and Yakima County (IAA No. C1600074) dated November 17, 2015.
- Pacific Groundwater Group (PGG) Agreement with Yakima County dated December 8, 2015.
- Agreements for Radio Advertising with Bustos Media, Radio Yakima, Radio KDNA, and Townsquare Media October, 2015.



DEPARTMENT OF
ECOLOGY
State of Washington

IAA No. C1600074

INTERAGENCY AGREEMENT (IAA)

BETWEEN

THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

AND

YAKIMA COUNTY

THIS INTERAGENCY AGREEMENT (IAA) is made and entered into by and between the **STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY**, hereinafter referred to as "ECOLOGY," and **Yakima County**, hereinafter referred to as the "County," pursuant to the authority granted by Chapter 39.34 RCW.

IT IS THE PURPOSE OF THIS AGREEMENT is for Yakima County to complete the Groundwater Management Program as described in WAC 173-100 through the Lower Yakima Valley Groundwater Management Area (LYV-GWMA).

WHEREAS, Budget Section 3083 for the Dept. of Ecology is showing the 2013-2015 biennium appropriation specifically designated (proviso) for the Lower Yakima GWMA Program Development (92000085) in the amount of \$1,614,000.

WHEREAS, the above proviso is a Capital appropriation within the 2013-2015 biennium budget from the Washington State Legislature.

WHEREAS, this is expected to be the final appropriation to Yakima County for completion of the Groundwater Management Program as described in WAC 173-100 for the LYV-GWMA.

THEREFORE, IT IS MUTUALLY AGREED THAT:

1) STATEMENT OF WORK

Yakima County shall furnish the necessary personnel, equipment, material and/or service(s) and otherwise do all things necessary for or incidental to the performance of the work set forth in Appendix A, attached hereto and incorporated herein.

2) PERIOD OF PERFORMANCE

Subject to its other provisions, the period of performance of this IAA shall commence on July 1, 2015 and be completed by December 31, 2017, unless terminated sooner as provided herein. Amendments extending the period of performance, if any, shall be at the sole discretion of ECOLOGY.

3) COMPENSATION

Compensation for the work provided in accordance with this IAA has been established under the terms of RCW 39.34.130, and RCW 39.26.180(3). This is a performance-based contract, in which payment is based on the successful completion of expected deliverables. The parties have determined that the cost of accomplishing the work herein will not exceed \$1,614,000. Payment for satisfactory performance of the work shall not exceed this amount unless the parties mutually agree to a higher amount. Compensation for services shall be based on the terms set forth in accordance with the tasks listed in Appendix A, Statement of Work and Budget, which is attached hereto and incorporated herein. ECOLOGY will not make payment until it has reviewed and accepted the completed work.

4) BILLING PROCEDURE

Yakima County shall submit state form, Invoice Voucher A19-1A for payment requests. Payment will be made within thirty (30) days of a properly completed invoice, form A19-1A, with supportive documentation. Each invoice shall reference this Agreement (IAA) number and clearly identify the items related to performance under this Agreement. All expenses invoiced shall be supported with copies of invoices paid. Upon expiration of this Agreement, any claim for payment not already made shall be submitted within 30 days after the expiration date or the end of the fiscal year, whichever is earlier.

Invoices are to be sent to:

State of Washington
Department of Ecology
Attn: Charles McKinney
1250 W. Alder St.
Yakima, WA 98903-0009

Invoices may be submitted on a quarterly basis or at the completion of the work.

Payment for approved and completed work will be issued through Washington State's Department of Enterprise Services Statewide Payee Desk. To receive payment you must be registered as a state-wide vendor. To register submit a state-wide vendor registration form and an IRS W-9 form at website, <http://www.des.wa.gov/services/ContractingPurchasing/Business/VendorPay/Pages/default.aspx>. If you have questions about the vendor registration process you can contact DES at the Payee Help Desk at (360) 407-8180 or email payeehelpdesk@des.wa.gov.

5) ALTERATIONS AND AMENDMENTS

This Agreement may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

6) SUBCONTRACTORS

Yakima County agrees to take complete responsibility for all actions of any Subcontractor used under this Agreement for the performance. When federal funding is involved there will be additional subcontractor requirements and reporting.

Prior to performance, Yakima County shall identify subcontractor(s) who will perform services in fulfillment of Agreement requirements, including their name, the nature of services to be performed, address, telephone, WA State Department of Revenue Registration Tax number (UBI), federal tax identification number (TIN), and anticipated dollar value of each subcontract.

7) ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

8) DISPUTES

In the event that a dispute arises under this Agreement, it shall be determined by a Dispute Board in the following manner. Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms, and applicable statutes and rules, and then make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties hereto. The cost of resolution will be borne by each party paying its own cost. As an alternative to this process, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control.

9) FUNDING AVAILABILITY

ECOLOGY's ability to make payments is contingent on availability of funding. In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date and prior to completion or expiration date of this Agreement, ECOLOGY, at its sole discretion, may elect to terminate the agreement, in whole or part, for convenience or to renegotiate the agreement subject to new funding limitations and conditions. ECOLOGY may also elect to suspend performance of the agreement until ECOLOGY determines the funding insufficiency is resolved. ECOLOGY may exercise any of these options with no notification restrictions.

10) GOVERNING LAW AND VENUE

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws. This Agreement shall be construed and interpreted in accordance with the laws of the state of Washington, and the venue of any action brought hereunder shall be in the Superior Court for Thurston County.

11) INDEPENDENT CAPACITY

The employees or agents of each party who are engaged in the performance of this Agreement shall continue to be employees or agents of that party and shall not be considered for any purpose to be employees or agents of the other party.

12) ORDER OF PRECEDENCE

In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

- a. Applicable federal and state of Washington statutes, regulations, and rules.
- b. Mutually agreed written amendments to this Agreement.
- c. This Agreement.
- d. Statement of Work and Budget.
- e. Any other provisions of this Agreement, including materials incorporated by reference.

13) RECORDS MAINTENANCE

The parties to this Agreement shall each maintain books, records, documents and other evidence that sufficiently and properly reflect all direct and indirect costs expended by either party in the performance of the service(s) described herein. These records shall be subject to inspection, review or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal officials so authorized by law. All books, records, documents, and other material relevant to this Agreement will be retained for six years after expiration and the Office of the State Auditor, federal auditors, and any persons duly authorized by the parties shall have full access and the right to examine any of these materials during this period.

Records and other documents, in any medium, furnished by one party to this Agreement to the other party, will remain the property of the furnishing party, unless otherwise agreed. The receiving party will not disclose or make available this material to any third parties without first giving notice to the furnishing party and giving it a reasonable opportunity to respond. Each party will utilize reasonable security procedures and protections to assure that records and documents provided by the other party are not erroneously disclosed to third parties.

14) RIGHTS IN DATA

Unless otherwise provided, data which originates from this Agreement shall be "works for hire" as defined by the U.S. Copyright Act of 1976 and shall be owned by equally by Ecology and the County. Data shall include, but not be limited to, reports, documents, pamphlets, advertisements, books magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, register, and the ability to transfer these rights.

15) SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of this agreement, and to this end the provisions of this Agreement are declared to be severable.

16) TERMINATION FOR CAUSE

If for any cause, either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party will give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within 15 working days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

17) TERMINATION FOR CONVENIENCE

Either party may terminate this Agreement upon thirty (30) days' prior written notification to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

18) WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

19) AGREEMENT MANAGEMENT

The representative for each of the parties shall be responsible for and shall be the contact person for all communications and billings regarding the performance of this Agreement.

The ECOLOGY Representative is:	The County Representative is:
Name: Charles McKinney Address: 1250 W. Alder St. Yakima, WA 98903	Name: Vern Redifer Address: Yakima County Courthouse Rm 406 Yakima, WA 98901
Phone: 509-457-7107 Email: cmck461@ecy.wa.gov Fax: 509-575-2809	Phone: 509-574-2300 Email: vern.redifer@co.yakima.wa.us Fax:

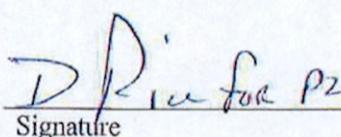
20) ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

The signatories to this Agreement represent that they have the authority to bind their respective organizations to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement.

**State of Washington
Department of Ecology**


Signature

12/2/15
Date

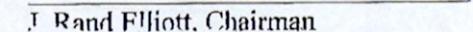
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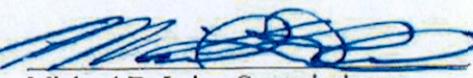
Deputy Director

Approved as to form:
Attorney General's Office

BOARD OF YAKIMA COUNTY COMMISSIONERS

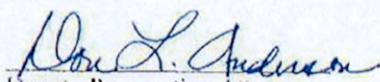
Excused


J. Rand Elliott, Chairman

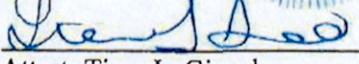

Michael D. Leita, Commissioner


Kevin J. Bouchey, Commissioner
*Consulting the Board of County Commissioners
for Yakima County, Washington*

Approved as to form:


Deputy Prosecuting Attorney

6
BOCC329-2015
November 17, 2015


Attest: Tiera L. Girard
Clerk of the Board

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Attachment A
Statement of Work and Budget

BACKGROUND: The Lower Yakima Valley Groundwater Management Area (LYV-GWMA) was activated in accordance with WAC 173-100 by Order of the Director of Ecology on November 15, 2011 designating Yakima County as the Lead Agency. The purpose of the GWMA is to develop a program that, when implemented, will reduce nitrate contamination concentrations in groundwater below state drinking water standards.

INTENDED OUTCOME/WORK: Yakima County, as Lead Agency for the LYV-GWMA and working with and through the Groundwater Advisory Committee, shall complete a Groundwater Management Program in accordance with WAC 173-100 that will provide the appropriate agencies and entities with an effective and implementable plan for reducing nitrate contamination of groundwater in the Groundwater Management Area.

1. Administrative Functions:

- 1.1.** Schedule, arrange for, and coordinate Ground Water Advisory Committee (GWAC) meetings and Technical Workgroup meetings, provide public notice for each meeting.
- 1.2.** Take and prepare minutes. Maintain central files of committee activities, correspondence, and work products.
- 1.3.** Present draft materials to the committee for review, respond to comments from the committee.
- 1.4.** Other activities as appropriate.

2. Program Functions:

- 2.1.** Prepare a two-year work plan, schedule, and budget for the completion of the GWMA program.
- 2.2.** Assist the GWAC in performing their role of overseeing the development of the Groundwater Management Plan.
- 2.3.** Submit properly completed invoices with state invoice voucher (A19-1A) on a quarterly basis and at the end of each quarter.
- 2.4.** Produce and submit quarterly status reports.
- 2.5.** Execute interlocal agreements or other contracts.
- 2.6.** Maintain all records, books, documents and other evidence that sufficiently and properly reflect all direct and indirect costs expended.
- 2.7.** Continue implementation and maintenance of a public outreach and education program as agreed upon by the GWAC (and as described in the Education and Public Outreach (EPO) Work Plan) including a web-based information application.

2.8. Other activities as appropriate.

3. Technical Functions

3.1. Working in conjunction with the GWAC and its Work Groups, retain subcontractors as needed, conduct studies, collect and analyze data, draw conclusions, and draft reports for GWAC review.

- a. Identify needs for additional data on nitrate sources, develop Quality Assurance Project Plans (QAPPs), carry out studies such as deep soil sampling, irrigation water management and manure lagoon assessment; analyze and interpret results**
- b. Design a long-term effectiveness monitoring program**

3.2. Develop the Groundwater Management Program based on the requirements and guidelines in WAC 173-100-100, and including the following major chapters:

- (1) An area characterization section**
- (2) A problem definition section**
- (3) Water quantity/quality goals and objectives**
- (4) Alternatives section outlining land and water management strategies for reaching program goals**
- (5) Recommendations section containing chosen alternatives**
- (6) Implementation section**

3.3. Coordinate SEPA review once Groundwater Management Program has been developed.

3.4. Conduct public hearing, consolidate findings and present to GWAC.

3.5. Other activities as appropriate.

DELIVERABLES

1. By end of each quarter

1.1 For each meeting of the GWAC: submit a copy of the agenda, minutes, attendance and public meeting notice

1.2 Submit properly completed invoices with state invoice voucher (A19-1A)

1.3 Submit written quarterly status report summarizing GWAC plans, activities and work products, and describing any interlocal agreements or other contracts, including resulting work products.

2. By end of final quarter: December 31, 2017

4.1 Submit a completed Groundwater Management Program as described in WAC 173-100-100.

4.2 Conduct SEPA Review on the Groundwater Management Program pursuant to 43.31C RCW.

4.3 Hold Public Hearing on the proposed program, submit consolidated findings to the GWAC, assist in resolving any non-concurrence.

4.4 Submit a plan for funding and operation of the groundwater monitoring network and for the periodic review and revision of the Groundwater Management.

GWMA Contract Budget
July 1, 2015 – December 31, 2017

Task No.	1	2	3	1 to 3
Task category	Admin. Functions	Program Functions	Tech. Functions	Totals
Labor-Wages	\$ 54,000	\$ 71,000	\$ 50,000	\$ 175,000
Labor-Benefits	\$ 27,000	\$ 36,000	\$ 25,000	\$ 88,000
Supplies (office supplies, copying, binding, mtng. refreshments)	\$ 18,000	\$ 20,000	\$ 2,000	\$ 40,000
Equipment	\$ 2,000		\$ 2,000	\$ 4,000
Travel Staff travel to & from meetings and events	\$ 1,000	\$ 500	\$ 500	\$ 2,000
Advertising Meeting & other notices: newspapers	\$ 9,000	\$ 1,000		\$ 10,000
Consultants	\$ 110,000	\$ 160,000	\$ 1,025,000	\$ 1,295,000
Total	\$ 221,000	\$ 288,500	\$ 1,104,500	\$ 1,614,000

**A/E CONSULTANT AGREEMENT
FOR PROFESSIONAL SERVICES**

This Consultant Agreement for Professional Services ("Agreement") is entered into as of January 1, 2016, between Yakima County Public Services, of 128th North 2nd Street, Room 408 Courthouse, Yakima, Washington 98901-2614 ("Client"), and Pacific Groundwater Group, of 2377 Eastlake Avenue East, Seattle, WA 98102 ("Consultant"). The parties agree as follows:

I. PROJECT. Client, as administrator for the Lower Yakima Valley Groundwater Advisory Committee ("GWAC"), desires to engage the services of Consultant to perform certain consulting, design, advisory, and/or surveying services, "Consulting Services," for the Lower Yakima Valley Groundwater Management Area ("GWMA") Program ("Project").

II. OBJECTIVES AND SCOPE OF SERVICES. Consultant shall perform the services described in *PGG Scope of Services, Exhibit "A"* for the Lower Yakima Valley GWAC ("Services").

III. PAYMENT. Client shall pay Consultant as compensation for the Services at the hourly rates quoted in the Project Cost Estimate presented in Exhibit B to this *Agreement*, plus expenses, up to an amount not to exceed Thirty seven thousand, five hundred dollars (\$37,500.00).

IV. STANDARD PROVISIONS. The standard provisions for this *Agreement* are on the next page.

V. ADDITIONAL PROVISIONS. The following additional provisions shall apply to this *Agreement*:

Consultant shall transfer all digital and paper materials, including, without limitations, files, records, and maps, regarding the Project to Client or Client's designee within 30 days of completion or termination of this Agreement under this Additional Provision. Transfer of materials does not include proprietary records or property.

CONTRACTOR / CONSULTANT

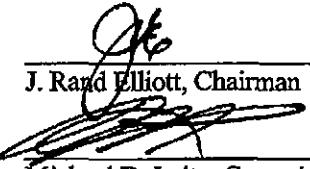
By 
Title PRINCIPAL
Date 11.23.15

Attest: Tiera L. Girard
Clerk of the Board

APPROVED AS TO FORM:

Don S. Anderson
Deputy Prosecuting Attorney

BOARD OF YAKIMA COUNTY COMMISSIONERS

J. Rand Elliott, Chairman

Michael D. Leita, Commissioner

Kevin J. Bouchey, Commissioner
*Constituting the Board of County Commissioners
for Yakima County, Washington*



BOCC370-2015
December 8, 2015

STANDARD PROVISIONS

1. Payments.

1.1 **Monthly Invoices.** Monthly invoices shall be issued for all Services performed under this *Agreement*.

1.1.1 **Lump Sum.** A lump sum contract is based on the percentage of work completed; and the contract amount may be increased for any unanticipated event, which is beyond Consultant's control and which increases the level of services required to complete the Project.

1.1.2 **Time and Materials.** A time and materials contract is based on the hourly rates set forth in Consultant's prevailing *Schedule of Billing Rates*, which may be amended from time to time, plus expenses.

1.1.3 **Retainers.** Retainers are applied toward the final invoice.

1.2 **Expenses.** Expenses include all out-of-pocket costs for technical, professional and clerical services and all costs for transportation; meals and lodging; laboratory tests and analyses; telephone; printing, copying, and binding. County shall pay all governmental fees, permits and charges.

1.3 **Payment Date.** Invoices are due and payable within thirty (30) days after the date of the invoice.

1.4 **Past Due Accounts.** Any invoice not paid within thirty (30) days after the date of the invoice shall bear interest at an annual rate of 18% on the daily outstanding balances.

1.5 **Stop Work.** Consultant may stop work on the Project and withhold delivery of all work product until County's obligations to Consultant are paid in full.

1.6 **Disputes.** Invoices shall outline the Services performed, and the charges and expenses for such Services. Disputes regarding an invoice shall be forwarded in writing to Consultant within twenty (20) days of the date of the invoice. If County does not dispute the invoice within the prescribed time period, the invoice shall be deemed to be accurate.

1.7 **Estimated Fees.** Estimated fees for Services to be performed are only estimates, and such fees may not accurately reflect the ultimate charges to County.

2. **Notice to Proceed.** This *Agreement* constitutes County's notice to proceed with the Services.

3. **Subconsultants.** Consultant may retain subconsultants to assist Consultant in performing the Services.

4. **Extra Work.** If County desires work to be performed beyond the Services described in this *Agreement* ("Extra Work"), County must authorize the *Extra Work* by signing a written supplement. If a written supplement is impracticable, then a written or electronic statement authorizing the *Extra Work* is required. Payment for all *Extra Work* shall be on a time and materials basis.

5. **Safety and Construction.** Consultant is not responsible for construction means, methods, techniques, sequences of procedures, or safety precautions and programs related to the work performed by contractors, subcontractors, or anyone else associated with the Project.

6. **Cost Estimates.** Consultant does not warrant construction cost estimates.

7. **Use of Documents.** County shall retain ownership to all documents and work products under this *Agreement*, and Consultant or other entities may only use such documents and work product in connection with the Project.

8. **Professional Standards.** Consultant shall perform the Services according to the standard of care ordinarily exercised under similar conditions by similarly qualified professionals who are currently practicing in the area where Consultant is located. Consultant makes no express or implied warranties.

9. **Indemnity.** The Contractor's Mutually Negotiated Waiver of Employer's Immunity under Title 51 RCW agrees, intends and promises that its duty to defend, indemnify, and hold harmless Yakima County, its officers, employees, agents, volunteers, and insurers under this Agreement shall be fully effective regardless of any provision to the contrary in Title 51 RCW, Washington's Industrial Insurance Act. Accordingly, based upon mutual negotiation between the Contractor and Yakima County, Contractor hereby expressly waives its immunity from tort liability under Title 51 RCW, but only to the extent such legal rights under this Agreement or other applicable law to be fully defended, indemnified, and held harmless by Contractor from claims or suits by Contractor's workers or employees, or any assignee of or anyone subrogated to any of their rights or their interests for injuries or losses experienced by Contractor's workers or employees caused by the acts of omissions of Contractor or by the acts or omissions of anyone directly or indirectly employed by or under contracted with Contractor or anyone for whose acts Contractor might be liable absent the provisions to Title 51 RCW.

10. **Liability Insurance.** The Consultant shall have liability insurance with coverage in the sum of \$2,000,000 and shall provide proof of insurance if requested. The coverage provided to Yakima County, its officers, employees, agents, volunteers, and insurers as Additional Insureds shall be primary and not contributory to any other insurance that may be available to such Additional Insureds.

11. **Limitation of Liability.** Consultant's liability for its acts, errors or omissions is limited to the total fee for the Services performed under this *Agreement*. All actions or proceedings are barred three years after County knew or should have known of any claim or damage, or five years after substantial completion of the Services, whichever occurs first.

12. **Alternative Dispute Resolution.** In the event that any dispute shall arise as to the interpretation of this agreement, or in the event of a notice of default as to whether such default does constitute a breach of the contract, and if the parties hereto cannot mutually settle such differences, then the parties shall first pursue mediation as a means to resolve the dispute. If the afore mentioned methods are either not successful then any dispute relating to this Agreement shall be decided in the courts of Yakima County, in accordance with the laws of Washington. If both parties consent in writing, other available means of dispute resolution may be implemented.

13. **Attorney's Fees.** If any legal action or proceeding is commenced relating to this Agreement, the prevailing party is entitled to recover its reasonable attorneys' fees and costs.

14. **Termination.** This *Agreement* may be terminated upon fifteen (15) days written notice to the other party. In such event, County shall pay Consultant for all Services performed, under the scope of work and for all related expenses incurred prior to the effective date of termination.

15. **Governing Law and Venue.** This *Agreement* shall be governed by the laws of the state of Washington. Venue for any action or proceeding shall be in the Superior Court of Yakima County.

16. **Survival.** The provisions of this *Agreement* shall survive its termination and completion of Services.

17. **Complete Agreement.** This *Agreement* constitutes the complete and final understanding between the parties and may be amended by the prior written consent of both parties.

18. **Nondiscrimination.** The Consultant agrees that it shall not discriminate against any person on the grounds of race, creed, color, religion, national origin, sex, sexual orientation, age, marital status, political affiliation or belief, or the presence of any sensory, mental or physical handicap in violation of the Washington State Law Against Discrimination (RCW chapter 49.60) or the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) or any other applicable state, federal or local law, rule or regulation.

Exhibit "A"

PGG SCOPE OF SERVICES

Task 1 – Monitoring Well Network Design

Objective

Design an ambient groundwater monitoring system for the Lower Yakima Valley Groundwater Management Area.

Agree on the design and plan for installation and sampling of purpose-built monitoring wells.

Services

PGG will propose the design of a purpose-built groundwater monitoring system for consideration by Yakima County and the advice of the Lower Yakima Valley Groundwater Advisory Committee. The design shall recommend the optimum number and location of specific groundwater monitoring wells, the estimated cost of and process for installation of such wells, the optimum schedule, process and cost for the monitoring of such wells, including a scale of prioritization indicating which of the specific wells should be given the greatest priority of early installation and/or monitoring so as to best establish a baseline of water quality conditions within the Groundwater Management Area. The system should be designed to monitor groundwater near the water table and minimize locations likely to be anomalous as a result of local man-made or natural conditions. The total number of wells has not yet been determined, but should be based on achieving a reasonable well density, availability of alternative sampling locations, and the general pattern of land use variation. The total number in the designed system may exceed that number that could be installed with current funding. Costs for different sized networks will be estimated.

PGG will also recommend a set of surface water stations (that reflect shallow groundwater conditions, e.g.: wasteways and drains during the non-irrigation season) that could be monitored in concert with recommended groundwater well locations.

The locations of all recommended sites will be presented by location description and in GIS format.

PGG will attend two Data Committee meetings by phone to discuss comments on two draft plans.

Client Responsibilities

Yakima County will provide the following to PGG, as mapped in GIS to assist with system design:

- Publicly owned land
- Depth to water
- Groundwater flow directions
- Broad land use categories (e.g. : irrigated agriculture, septic density)

- Prior sampling stations and nitrate concentrations.
- Wasteways, drains and other surface water bodies that can be sampled to measure groundwater nitrate concentrations in the non-irrigation season.
- road right-of-way data, to the extent is available in GIS format.

The GWAC's Data Collection Work Group will review up to two sequential draft system designs, both recommending locations and design of wells.

Assumptions

- GWAC's Data Collection Work Group will provide PGG a compiled set of its comments on the two draft plans within three weeks of their consideration by the Work Group.
- The monitoring wells will not be located so as to monitor specific parcels.
- Additional monitoring stations may become available to help meet GWMA objectives. Some of the stations are identified by the County well inventory work, and others may be established by future phases of monitoring well installation or other work.
- Upon completion of this task, the County may contract with PGG to implement development of all or a portion of the ambient groundwater monitoring system proposed pursuant to this contract.

Deliverables

- Up to two draft and one final plan, each containing all the elements described above in "Services".

Exhibit "B"

Project Cost Estimate

BROADCAST AGREEMENT



706 Butterfield Road - Yakima, WA 98901
P: 509.457.1000 - F: 509.452.0541

P: 509.457.1000 - F: 509.452.0541

It is understood that this agreement may be terminated by either party upon 7-days written notice for (spots) and 15-days for programs. Payment is due 15-days from invoice date, unless otherwise specified on the contract. All invoices not paid prior to the 30th of the month, following the date of invoice, are subject to a service charge of one percent (1%) per month (12% per annum). Returned checks are subject to a returned fee of \$3.00 per item and a subsequent payment must be made in cash, cashier's check or valid credit card. Delinquent accounts (45-days from invoice date) will not air ads until sum due to Bustos Media is made current. If Bustos Media is required to commence legal action to collect an amount due and owing, the advertiser shall also pay Bustos Media reasonable attorney's fees and court costs for such collection on effort. Credit applications are required for new clients. First month's payment is due and payable in advance of schedule commencement. One time event schedules are due in full prior to start of initial broadcast date. Other terms and conditions are new attached and are made part of this agreement. Advertiser agrees and authorizes Bustos Media to obtain a credit report.

Client Approval
DON GATCHALIAN
Print Name
D. Gatchalian 10/2/15
Advertiser Signature Date

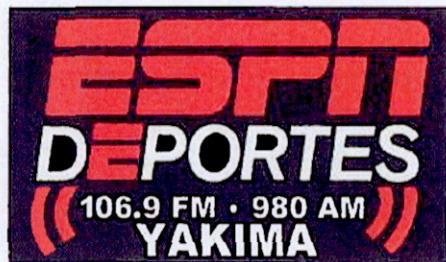
Sales Rep Signature	Date
General Manager Approval	Date

Processed by Traffic

Total Spot Order				
Totals	Page 1	Page 2	Page 3	Order
Spots	83	0	0	83
Gross	940.00	0.00	0.00	940.00
Net	940.00	0.00	0.00	940.00

Total Package Order				
Totals	Page 1	Page 2	Page 3	Order
Spots	83	0	0	83
Gross	0.00	0.00	0.00	0.00
Net	0.00	0.00	0.00	0.00

Are you trying to reach the underserved Latino sports fan? YOU WILL NOW HAVE A WAY!!!



Radio Yakima now has a full-time all-Spanish sports radio station on 106.9FM & 980AM.

Marketing Plan:

- Your business will receive 100 commercials that run from 6a-7p Monday thru Friday.
- Your business will receive 50 commercials that run from 6a-Mid Monday thru Sunday.

ALL COMMERCIALS are 30 seconds in length.

Starting Oct. 2015 Ending Nov. 2015

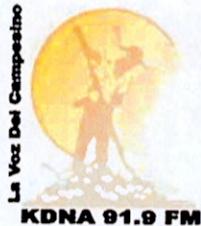
— Total investment per month is \$500 *Not to exceed
PRICE IS NET TO STATION \$500.00

Agreed: X John Date 10/2/15
Business Name: yakima County Public Services

*Radio Yakima and KXDD-FM, THE HAWK-FM, CHERRY-FM, HOT-FM, KBBO-AM, KTCA-AM do not and shall not discriminate, in any way, on the basis of race or gender, in respect to their advertising practices.

Two week cancellation policy for all Radio Yakima Contracts.





Northwest Communities Education Center

Radio KDNA

P. O. Box 800 Granger, Washington 98932
(509) 854-2222 Fax (509) 854-2223

Radio KDNA Underwriting Agreement

This underwriting is made this 02 of October, 2015 between KDNA, 121 Sunnyside Avenue, Granger, WA 98932 and

Underwriter: Yakima County (Public Service Ground Water Room #400)
Contact name: Ignacio Marquez
Address: 128 North 2nd Street Yakima, WA 98902
Telephone/Fax/Email: (509) 249-6970 imarquez@agr.wa.gov

Yakima County (Ground Water) desires to support KDNA's general operations by providing funding in the amount of \$1,000.00 in the form of an unrestricted operating grant. Yakima County (Ground Water) agrees to pay such funds in accordance with the payment schedule below.

Payment schedule: FY 2015, due each and every 15th day of the month or up on completion of agree terms.

KDNA desires to acknowledge underwriter's public interest support in accordance with Federal Communications Commission, Internal Revenue Code, Public Broadcasting Service, National Public Radio and KDNA's local Underwriting Guidelines. The underwriter's support for the spots and program will begin on October, 2015 and will continue for 5 weeks/months, ending on February, 2016. KDNA's acknowledgement will be in the manner set forth in the Production Specific Worksheet.

KDNA reserves the right to schedule, preempt, and/or reschedule said programs as the station deems necessary in order to provide the most significant service to its listening audience.

KDNA retains the right to interrupt or preempt any announcement covered by this Agreement at any time in case of emergency, or to broadcast other announcement or programs, if in its editorial discretion, to do so would best advance the Station's public interest responsibilities.

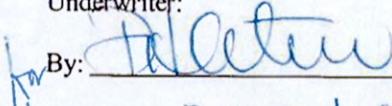
This agreement shall be governed by, construed and enforced in accordance with the laws of the State of Washington and shall be performable in Yakima County, Washington.

KDNA:

By: 

Print Name: Carolina Montes

Underwriter:

By: 

Print Name: DONALD H. GATCHALIAN
ASSISTANT DIRECTOR



**Northwest Communities Education Center
Public Radio KDNA/RADIO CADENA
PROPOSAL**

**Package
Yakima County (Ground Water)**

<u>Activity:</u>	KDNA Value	Yakima County (Ground Water) Cost
88 Announcements (30-60 seconds in length)	\$20 each	\$11.3636 each
Production of the announcement	\$200	\$0.00
One hour Public Affairs Program (October-February depending on date availability)	\$550	\$0.00

Sales Order

Stations: KDBL-FM, KIT-AM
 Contract Name: 07/31/05 Kit kdbl well
 Contract#: (none)
 Start Date: 8/17/15 End Date: 10/04/15
 Revenue Type: BRC-LOCAL DIRECT Type: Cash
 Advertiser: FLOOD CONTROL PUBLIC SERVICES
 Address: 128 North 2nd Street, Suite 40
 City: Yakima State: WA
 Zip: 98901
 Product Name: 07/31/05 kit kdbl well
 Competitive Code: MISCELLANEOUS

KDBL-FM

No	DATES		Alt wks	TIMES		LEN	DISTRIBUTION							RATE	TOTALS		PTY	
	START	END		START	END		M	T	W	T	F	SA	SU	Per Wk	D/W	SPOTS	\$\$	
1	8/17/15	10/04/15		6:00 AM	9:00 AM	30	1	1	1	1	1		1	6	D	21.00	42	882.00
2	8/17/15	10/04/15		12:00 AM	12:00 AM	30	1	1	1	1	1	1	1	6	D	0.00	42	0.00

No	DATES		INVENTORY TYPE				ORDER BY		QTY	PRICING STRUCTURE	RATE	TOTAL
	START	END	Spots	42	Per Item	\$3.00	\$126.00					
1	8/17/15	10/04/15	30 SECOND SPOT									
New / Revised												
Revenue Type: DIG-LOCAL DIRECT												
Salesperson Commission: 20.00%												
Daypart: M-Sa 6:00 AM-9:00 AM												

TOTAL SPOT \$882.00 (84 SPOTS), ALTERNATIVE REVENUE \$126.00, GROSS \$1,008.00, NET \$1,008.00

KIT-AM

No	DATES		Alt wks	TIMES		LEN	DISTRIBUTION							RATE	TOTALS		PTY	
	START	END		START	END		M	T	W	T	F	SA	SU	Per Wk	D/W	SPOTS	\$\$	
1	8/17/15	10/04/15		6:00 AM	9:00 AM	30	1	1	1	1	1		1	5	D	24.00	35	840.00
2	8/17/15	10/04/15		12:00 AM	12:00 AM	30	1	1	1	1	1	1	1	5	D	0.00	35	0.00

No	DATES		INVENTORY TYPE				ORDER BY		QTY	PRICING STRUCTURE	RATE	TOTAL
	START	END	Spots	35	Per Item	\$3.00	\$105.00					
2	8/17/15	10/04/15	30 SECOND SPOT									
New / Revised												
Revenue Type: DIG-LOCAL DIRECT												
Salesperson Commission: 20.00%												
Daypart: M-F 6:00 AM-9:00 AM												

TOTAL SPOT \$840.00 (70 SPOTS), ALTERNATIVE REVENUE \$105.00, GROSS \$945.00, NET \$945.00

Billing Projections: By Month

	Aug 15	Sep 15	Oct 15
CA	609.00	1,215.00	129.00
ST	559.20	1,115.70	278.10

Print Spot Prices

TOTAL SPOTS	154
SPOT TOTAL \$	1,722.00
ALTERNATIVE REVENUE TOTAL \$	231.00
GROSS TOTAL \$	1,953.00
ADJUSTED SPOTS	154
ADJUSTED TOTAL \$	1,953.00

APPROVE DECLINE

- Sales Manager
- Business Manager
- Asst Business Manager
- Traffic Manager