

Inland Pacific Northwest Wheat Producers: Past, Present & Future

Map

Deep loess soils, adequate rainfall, and a hundred years of experience have made the Inland Pacific Northwest region of Idaho, Oregon and Washington one of the most agriculturally productive places in the world. While various crops are grown, this study focuses on producers who grow wheat. Through this survey we are studying how social, cultural, economic, and climatic factors affect how you make decisions on your farm. It is part of a larger study, funded by the U.S. Department of Agriculture (USDA), on climate change adaptation and mitigation.



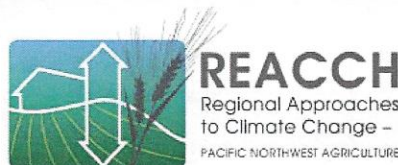
NOTE

If you are not the farm manager/operator or spouse/partner of the farm manager/operator, thank you for your time.

Please stop here and return this survey in the self-addressed, stamped envelope provided.



University of Idaho



1. Which best describes your relationship to the farm operation?

- Operator (Co-Operator) of owned and/or leased land
 Farm manager but not owner or lessée
 Other _____

2. How many total acres of each of the following crops did you manage during 2012, on land both leased and owned? (For crops, please list harvested acreage.)

Crop or Land Type	Owned Acres	Leased Acres
Winter Wheat		
Spring Wheat		
Peas/Lentils/Garbanzos		
Alfalfa or Hay		
Bluegrass or other grass seed		
Canola or other oilseeds		
Barley		
Other _____		
Other _____		
Summer Fallow (Summer 2012)		
Conservation Reserve Program (CRP)		
Irrigated crops		
TOTAL	acres	acres

3. How many leases did you hold from each of the following individuals or groups in 2012?

	Family Member	Family Corporation/ Partnership	Non-Family Individual	Non-Family Corporation/ Partnership	TOTAL LEASES
Number of Leases					

4. Who is involved in decision making about management practices on the farmland you own (in general) and the farmland you lease (in general)? Please mark with an "X" all that apply.

	Yourself	Spouse	Family Corporation/ Partnership	Non-Family Corporation/ Partnership	Landowner
Land Owned					
Land Leased					

5. With respect to information and advice for your **production management** strategies, how trustworthy do you find information from the following people?

Source	Production Management Strategies Information				
	Very Trustworthy	Somewhat Trustworthy	Neither	Somewhat Untrustworthy	Very Untrustworthy
Other producers in your county	1	2	3	4	5
Soil and Water Conservation District	1	2	3	4	5
Independent crop advisor	1	2	3	4	5
Crop advisor associated with particular company	1	2	3	4	5
University Extension	1	2	3	4	5
State-Level NRCS	1	2	3	4	5

6. Please rate the importance of each of the following types of information for determining rates of fertilizer application.

Subject	Information Source	Very Important	Important	Somewhat Important	Not Important At All	Not Applicable
Economics	Price of Crop	1	2	3	4	5
	Cost of Fertilizer	1	2	3	4	5
Agronomy	Last Year's Yields	1	2	3	4	5
	Soil Nitrogen Testing	1	2	3	4	5
	Plant Tissue Testing	1	2	3	4	5
	Organic Matter Soil Testing	1	2	3	4	5

7. For your most recent winter wheat and spring wheat harvests, please indicate how many times you conducted each of the following practices. If you did not conduct a practice, please leave that box blank.

Crop (Year Harvested)	Till	Fungicide	Herbicide	Fertilizer	Seed	Total Number of Passes
Winter Wheat (Year _____)						
Spring Wheat (Year _____)						

8. How strongly do you agree or disagree with each of the following statements regarding your management practices?

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
I consider myself to be an aggressive adopter of conservation practices.	1	2	3	4	5
Profitability is my greatest concern when considering a new production practice.	1	2	3	4	5
I am very concerned about glyphosate resistance.	1	2	3	4	5
Chemical fallow is the basis for my weed management program.	1	2	3	4	5
On-farm environmental outcomes are more important than net returns when considering changes to my management practices.	1	2	3	4	5
The timing of management practices has changed since I started farming.	1	2	3	4	5
I manage erosion with my tilling practices	1	2	3	4	5
Cost is my greatest concern when considering a new production practice.	1	2	3	4	5
I would consider partnering with a neighbor to purchase a drill or other piece of expensive equipment.	1	2	3	4	5
It is important for others to see that I am environmentally sensitive.	1	2	3	4	5

9. Please mark an "X" in the box next to the category that best fits your tillage practice.

Tillage	
Leave less than 30% residue on surface after planting, followed by multiple secondary tillage and application trips.	<input type="checkbox"/>
Leave more than 30% residue on surface after planting, followed by multiple secondary application trips.	<input type="checkbox"/>
Leave more than 30% residue on surface after planting, and leave soil undisturbed harvest to planting.	<input type="checkbox"/>

10. Approximately, what percent of your land is in each of the following hillslope categories? Total should equal 100%.

Slope	Less than 5% Slope	6-14% Slope	More than 15% Slope
Percent of Farmland, Leased and Owned	%	%	%

11. Please circle all of the months in which you typically make the decision about the following practices related to winter wheat production. If you do not typically carry out a practice, check "not applicable."

	January	February	March	April	May	June	July	August	September	October	November	December	Not Applicable
Decide purchase of winter wheat seed	1	2	3	4	5	6	7	8	9	10	11	12	NA
Decide purchase of seed for spring crop(s)	1	2	3	4	5	6	7	8	9	10	11	12	NA
Decide seeding rates	1	2	3	4	5	6	7	8	9	10	11	12	NA
Decide quantity for fertilizer purchase	1	2	3	4	5	6	7	8	9	10	11	12	NA
Decide fertilizer rates	1	2	3	4	5	6	7	8	9	10	11	12	NA
Decide upon crop rotation	1	2	3	4	5	6	7	8	9	10	11	12	NA

12. In the following table, please mark an "X" for each of the following precision agriculture technologies.

Level of Use	Precision Agriculture Technologies						
	Spatial Soil Mapping	Aerial Crop Imagery	GPS Guidance	Variable Seeding Equipment	Variable Fertilizer Applicator	Yield Monitor	Precision Ag Software
Have and use							
Have and do NOT use							
Do not have							

13. If you do NOT currently use any of the Precision Agriculture Technologies listed above, why not? (Mark all that apply.)

Equipment is too expensive

Difficult to learn to operate and maintain

Equipment lacks reliability

Lack of cost-share programs

Not cost-effective for my operation

I do not want to invest in new capital

Other (please specify) _____

14. Since 2007, have you tried any new planting practices anywhere on your farm operation?
Please mark all that apply.

- I tried new or different crop that I have not typically grown before.
- I tried new cultivars.
- I have an experimental area.
- I grew more winter rather than spring crops.
- I grew more spring rather than winter crops.
- Other (please specify) _____

15. Since 2007, have you changed your crop rotation for any of the following reasons?
Please mark all that apply.

- To improve soil quality
- To manage weeds
- To capitalize on crop prices
- Because of fuel costs
- Because of fertilizer costs
- I replaced fallow with crop.
- Due to weather
- Other (please specify) _____

16. Since 2007, have you used any of the following practices in order to manage residues?
Please mark all that apply.

- Bale
- Burn
- Mow
- Harrow
- Chemical fallow
- Plant legumes prior to wheat
- Other (please specify) _____

17. In your opinion, how would you describe the difference between weather and climate?

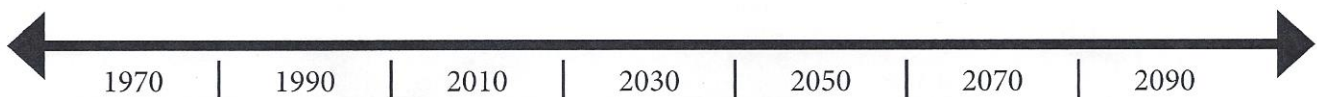
18. Please indicate how strongly you agree or disagree with each of the following statements:

	Strongly Agree	Somewhat Agree	Neither	Somewhat Disagree	Strongly Disagree
I have observed changes in weather patterns over my lifetime.	1	2	3	4	5
Average global temperatures are increasing.	1	2	3	4	5
Human activities are the primary cause of climate change.	1	2	3	4	5
I will have to make serious changes to my farming operation to adjust to climate change.	1	2	3	4	5

19. How great or small of a risk to your farm operation do you perceive each of the following changes to be? Please circle the level of risk.

	No Risk	Low Risk	Moderate Risk	High Risk	Do not know
Increased intensity of precipitation	1	2	3	4	0
Less reliable precipitation	1	2	3	4	0
Fewer days with frozen soil	1	2	3	4	0
Long-term drought	1	2	3	4	0
Cost of inputs	1	2	3	4	0
Unstable crop prices	1	2	3	4	0
Climate change policies	1	2	3	4	0

20. Please mark the timescale below with when you think climate change began or will begin to affect agricultural production in the Inland Pacific Northwest?

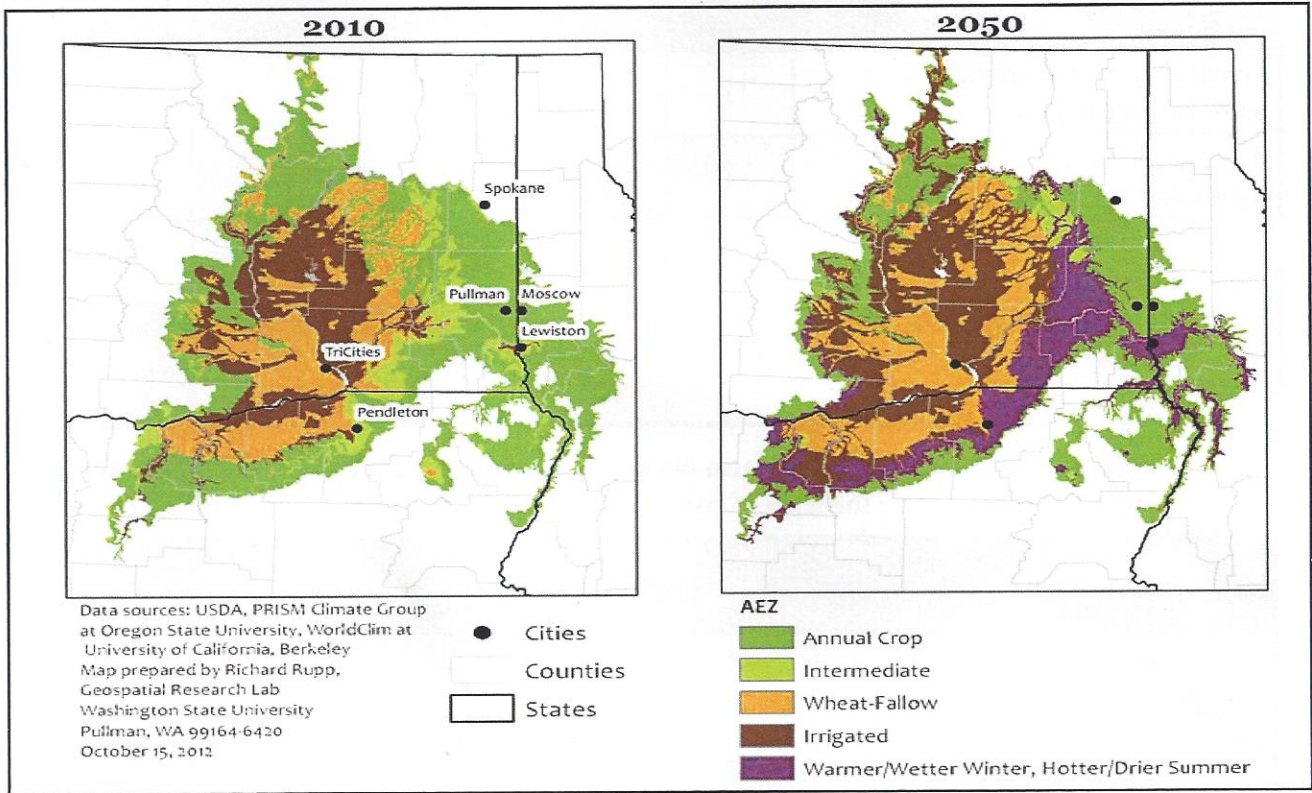


Check here if you do not believe climate change will affect agriculture here.

21. Who do you feel should be responsible for any costs associated with responding to climate change impacts in agriculture? Please check all that apply.

- Farmers and agricultural business
- Consumers
- Government
- All of them equally
- There isn't a cost

The following maps are the results from one climate model for the Inland Pacific Northwest.



22. If you were faced with the changes presented above, what amount of change would you likely make to the following practices for your operation?

	No Change	Small Changes	Moderate Change	Big Changes
Current cropping system	1	2	3	4
Current rotation	1	2	3	4
Current tillage practice	1	2	3	4
Current soil conservation practice	1	2	3	4
Current crop insurance	1	2	3	4

23. If conditions change as in the maps above, please circle the degree of both environmental risk and economic risk you perceive to farm production in *your growing area*.

	No Risk	Low Risk	Moderate Risk	High Risk	Not Applicable
Environmental Risk	1	2	3	4	NA
Economic Risk	1	2	3	4	NA

24. With respect to **climate change information**, how trustworthy do you find information from the following people?

Source	Climate Change Information				
	Very Trustworthy	Somewhat Trustworthy	Neither	Somewhat Untrustworthy	Very Untrustworthy
Other producers in your county	1	2	3	4	5
Soil and Water Conservation District	1	2	3	4	5
Independent crop advisor	1	2	3	4	5
Crop advisor associated with particular company	1	2	3	4	5
University Extension	1	2	3	4	5
State-Level NRCS (Natural Resources Conservation Service)	1	2	3	4	5

In your packet, you will find maps of the Inland Pacific Northwest. Please mark them with the following information about your production:

- A. Mark all of the parcels you farm with an "X."
- B. Circle the "X" that represents the LARGEST PARCEL of land you farm.

25. How many acres is this largest parcel? _____ acres
26. Use the following table to describe your crop rotation on the **single largest parcel**. In each column, mark an "X" next to crop(s) you grew, including fallow, in a given year.

Crop	2007	2008	2009	2010	2011	2012
Winter Wheat						
Spring Wheat						
Barley						
Pulse Crop (Peas, Lentils, Garbanzos) Specify _____						
Oilseed, Specify _____						
Hay, Specify _____						
Kentucky Bluegrass						
Fallow						
Other						

Single Largest Parcel & Maps

27. Please mark with an "X" which pests, weeds, and pathogens affect your **largest parcel** and the degree to which you can control them. Also, please circle in the final column to indicate if you feel you are confident in your ability to identify the species listed.

		Not Observed	Observed, Not a Pest	Treated, but Not Controlled	Treated and Controlled	I Am Confident in Identifying this Species
Pests	Aphids					yes/no
	Cereal Leaf Beetle					yes/no
	Hessian Fly					yes/no
	Wireworm					yes/no
Weeds	Downy brome					yes/no
	Italian ryegrass					yes/no
	Mayweed chamomile					yes/no
Pathogens	Wheat stripe rust					yes/no
	Fusarium crown rot					yes/no
	Rhizoctonia root rot					yes/no

28. Do you actively manage for any of the following beneficial organisms? Please mark all that apply. If none, leave blank.

- Beneficial above ground organisms (spiders, bees, etc.)
- Beneficial soil organisms (earthworms)
- Biological control agents (birds, bats, etc.)

29. How strongly do you agree or disagree with each of the following statements:

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Human ingenuity will ensure that we do NOT make the earth unlivable.	1	2	3	4	5
Despite our special abilities, humans are still subject to the laws of nature.	1	2	3	4	5
Humans will eventually learn enough about how nature works to be able to manage it.	1	2	3	4	5

30. Are you or your spouse employed off farm? Please circle one answer for each column.

Yourself	Spouse
No	No
Yes, Part-Time	Yes, Part-Time
Yes, Full-Time	Yes, Full-Time

31. What percent of your total household income comes from off-farm sources? _____%

32. What do you use the Internet for? Please mark all that apply.

- Email (text only)
- Visiting websites (i.e. news, weather, or markets, shopping) or web searches
- Sharing photos (via email or via social media)
- Managing finances (online banking, etc.)
- Downloading enterprise budgets or other ag-related software
- Watching movies or videos
- Other _____

33. How frequently do you consult the Internet for farm-related information, such as checking the weather or markets?

- Everyday
- Once or twice per week
- A few times a month
- A few times a year
- Never

34. Do you use any “apps” (for a smart phone or tablet) to support your farming enterprise?

- Yes, I use (please specify) _____
- Yes, I have a mobile device, but I do not use for farming enterprises
- No
- I don't know what this is

35. Which of the following categories best reflects your average gross annual sales from your entire farm operation?

- | | |
|----------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Less than \$24,999 | <input type="checkbox"/> \$100,000 - \$249,999 |
| <input type="checkbox"/> \$25,000 - \$49,999 | <input type="checkbox"/> \$250,000 - \$499,999 |
| <input type="checkbox"/> \$50,000 - \$99,999 | <input type="checkbox"/> \$500,000 - \$999,999 |
| | <input type="checkbox"/> \$1,000,000 or more |

36. Please describe your plans for the future of your farmland?

- Sell land
- Lease land
- Transfer to family member(s)
- Undecided at this time
- Other (please specify) _____

37. Circle the number which best describes the highest level of education you and your spouse (if married) have?

Level of Education	Self	Spouse
Elementary school (8th grade or less)	1	1
Some high school	2	2
High school graduate or GED	3	3
Vocational training beyond high school	4	4
Associate's degree	5	5
Some college, no degree	6	6
Bachelor's degree	7	7
Graduate / professional degree	8	8

38. In what year were you born? _____

39. How many years have you been managing a farm operation? _____ years

40. For how many generations has your family been farming in this area? _____ generations

*If you wish, please add any additional information or comments you would like to share.
Use an extra page if you wish. THANK YOU!*

Would you be willing to participate in a follow-up study? If so, please provide your contact information in the space below:

Name _____ Phone Number (____) _____

Address _____

e-mail address _____