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A DISCUSSION ABOUT THE OGALLALA AQUIFER

PAULA: Hi, Ron.

RON: How's it going, Paula?

PAULA: Oh, hey Taylor.

TAYLOR: Hi.

PAULA: Well,I'm glad we could get together today. Our group presentation is next Thursday--yikes! Anyway, I found an interesting (1) _____ about the Ogallala Aquifer in the western region of the United States.

RON: Really?Where in the west?I was born in Oklahoma.

PAULA: That's great--that's one of the states they mention in the article.There are some really good photos of (2) _____ in the region--maybe we can include some of them in our slides.

Look,here's a great photo of a farm in Kansas.

TAYLOR: Wow--that's a lot of corn! Is it for feeding (3) _____ ?

PAULA: Yeah.The article says that there are over 500 cattle on this farm.Here,Taylor,take a look.

TAYLOR: Thanks.Oh,I see.Wow.That's a lot of cattle!

RON: Yeah,it sounds like they're doing pretty well.So,what's the problem?The topic for our presentation is "How to (4) _____ the (5) _____ (6) _____."It doesn't seem like THAT farm is experiencing a crisis. I guess I'm not very clear on what we're supposed to talk about in our (7) _____ . I mean, what IS the aquifer crisis, anyway?

TAYLOR: It's the situation that (8) _____ Arnold covered in class last week. She talked about the aquifers; you know--the water that's in the (9) _____ . Since water from rain or rivers is (10) _____ in some places, a lot of water is (11) _____ up out of the ground for (12) _____ to grow crops for food

And when that water is gone, it's GONE.

RON: Hmmm.That must have been the day I was out sick. It sounds like I missed some important (13) _____ . OK,so,go on.

PAULA: Right,so some crops like corn need a lot of water to grow, and some of the western states in the U.S.are extremely (14) _____ . The average (15) _____ in Colorado,for example, is only 15 inches for the whole year. Compare that to Illinois, where they get around 40 inches of rain a year. I think I'd rather be a corn farmer in Illinois!

TAYLOR: Clearly 15 inches a year is not a lot of rain,b ut is it really an (16) _____ (17) _____ when we have such a huge

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aquifer? After all,it sits underneath eight BIG western states! And the water is helping people because it's used to (18) _____ , right?

PAULA: Right,the water is being used to grow crops, but the Ogallala Aquifer took around 15,000 years to (19) _____ .

TAYLOR: Wow. Really?

PAULA: Yeah, and the problem is that farmers and other people in the region have pumped the water out very quickly--it's only been in the past 70 years or so. Now there's much less water in the aquifer. Some people in western states don't even have water at their homes--for drinking or (20) _____ .

TAYLOR: Wow,that sounds pretty bad--not having (21) _____ clean water at home? I can't imagine not being able to (22) _____ every day.

RON: We've been lucky, I guess. I don't think we've ever experienced a serious water (23) _____ around here. It must be difficult for those people without water at home, but I think growing food is an even more important (24) _____ . People need to eat!

PAULA: True. So having enough water to grow food is also a problem, and that's why we need to think about the (25) _____ we're going to talk about in our presentation.

RON: What does the article say? Can farmers use water from rivers and (26) _____ to irrigate their crops instead of taking water from the aquifer?

PAULA: That's one possible solution,but unfortunately, rivers and streams are often far away, and it's quite difficult and expensive to (27) _____ water to large areas across long distances.

Still,i t's a possible solution for some people--just not for everyone.

TAYLOR: Hmmm.What if farmers in the west just reduced the amount of water they take from the aquifer? Then the water that's there would last longer.

RON: That's a smart solution. We had some neighbors in Oklahoma who did something called 'dryland farming'. They grew wheat, but they didn't use any irrigation.

TAYLOR: Huh.That's interesting. Why didn't they need to irrigate?

RON: With dryland farming, they (28) _____ that don't need much water.They also follow good water and soil (29) _____ practices. For example, they plant the (30) _____ at very specific times of year to (31) _____ what little rain they get. And to prevent the dry dirt,or soil,from blowing away,they plant trees to block,or break,the wind. One year my father and I helped our neighbors plant trees. They call it a "windbreak."

PAULA: Interesting, I've never heard of 'dryland farming'. It makes a lot of sense, and your personal experience with it would be good information for the presentation. In the real world, though,would everyone agree on the idea? The farmers who are raising corn and cattle are making a good living.They might not want to change.

TAYLOR: OK,but for our presentation at least, let's focus on these two possible solutions:

Number one, (32) _____ to distribute water from rivers and streams.And number two, water conservation--for example,through dryland farming.

PAULA: Sounds good!Both of those would help to solve the problems of not having enough water for homes and not enough water for crops. Now,let's decide which photos to include in our slides...

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