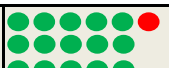
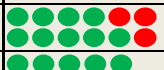
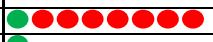
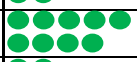
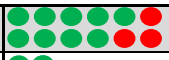
Reorganization of Remaining Challenges for Discussion

Denotes individual stakeholder highest agreement.
Denotes individual stakeholder highest disagreement.
Denotes people who agreed with a comment posted

	1. Inequitable distribution of compact compliance burden	
	2. Limited understanding of Water Supply & Use;	
	3. Over consumption of water has not been adequately addressed;	
	4. Regulatory measures have been inconsistent through time and water use	
Agreement and Disagreement	**Questions about water supply and water use**	
	3.a. Are we fully or over appropriated (Use scientific approach). ★★★★★	
	3.d. We are using more water than we have.	
	3.h. Over consumption is based off compliance, how do we know what the "right" streamflow was? Was it right when the compact was signed?	
	3.i. No way to make the river flow again	
	2.f How much flow is needed at the head gates to sustain system? Solution has to be based on science rather than politics. ★★	
	2.b What do we work towards? (how short are we?) ★★	
	Questions about the impacts of water use on streamflow	
	3.c. Deal with depletions –no additional depletions on starting point ★★	
	3.e. Is the amount pumped from N-Corpe an indication of how far we over developed ★	
	2.d Need to address areas of depletions ★	
	2.a Our farming practices have changed dramatically - effects on streamflow	
	Potential Solutions:	
	3.g. Find ways to reduce evaporation	
	3.f. Remove non-beneficial vegetation ★	
	3.b. Response times vary widely for actions we may propose. Think short, mid & long term ★	
	1.a. Allocations should be across the whole basin ★★★★★	
	1.b. What is a good metric for fairness and balance of different uses ★★	
	1.d. Allocations based on model area	
	1.f. Allocations by sub-basin based on recharge	
	2.c What is a good metric? ★	
	4.a. State law has created conflict between GW & SW	
	4.b. If Regulation; Can trade $ for water ★	
	4.c. Regulations don't work without consequences ★	
Mostly Agreement	**Opportunities to Increase Water Supplies so that the burden of compact compliance is not as reliant on regulatory actions on the water users across the basin**	
	1.h. Consider importing water from the east end of Republican	
	1.c. State Plan for recharge to aquifer	
	1.e. Excess water in the Platte needs to be transferred to the Republican ★★★	
	1.i. When there's excess water in the Platte and we need water here, why is the burden on wells and surface water ★★	

2. Limited understanding of Water Supply & Use	
e. Needs to be based on entire Basin not just DNR 10-50 policy (discussed under the guidance document) ★★	

Remaining Challenges with No Highest Disagreement

Denotes individual stakeholder highest agreement. ●
Denotes individual stakeholder highest disagreement. ●
Denotes people who agreed with a comment posted ★

	3. Over consumption of water has not been adequately addressed;	●●●●●●●●●●
No Highest Disagreement	**Questions about water supply and water use**	
	3.a. Are we fully or over appropriated (Use scientific approach). ★★★★★	●●●●
	3.d. We are using more water than we have.	●
	3.h. Over consumption is based off compliance, how do we know what the "right" streamflow was? Was it right when the compact was signed?	
	2.f How much flow is needed at the head gates to sustain system? Solution has to be based on science rather than politics. ★★	●
	2.b What do we work towards? (how short are we?) ★★	●
	Questions about the impacts of water use on streamflow	
	3.e. Is the amount pumped from N-Corpe an indication of how far we over developed ★	
	2.d Need to address areas of depletions ★	●●●●●
	2.a Our farming practices have changed dramatically - effects on streamflow	●●●●●●
	Potential Solutions:	
	3.f. Remove non-beneficial vegetation ★	●●●
	3.b. Response times vary widely for actions we may propose. Think short, mid & long term ★	
	1.b. What is a good metric for fairness and balance of different uses ★★	●
	1.d. Allocations based on model area	
	1.f. Allocations by sub-basin based on recharge	●
	2.c What is a good metric? ★	
	4.a. State law has created conflict between GW & SW	●●●
	4.b. If Regulation; Can trade $ for water ★	●●
	4.c. Regulations don't work without consequences ★	●●

Stakeholder Questions and Data Requests

Written Stakeholder Questions:

1. How many surface water acres are in the basin? How many groundwater acres are there in the basin? What is the impact of each on compact accounting/streamflow annually?

Acres that rely just on surface water make up a small percentage of all irrigated acres in the Basin yet they use a significant percentage of Nebraska's allocation under the Compact. If Compact allocations are considered supplies what obligations do surface water users have to balance their use with the Compact supply, i.e. should they be regulated like groundwater users?

2. What is the most effective use of the Nebraska water supply?

After some investigation, I have found that surface water acres account for a small percentage of the acres in the basin, but are a significant percentage of the water use in compact accounting. Is this an efficient use of water? Would it be more efficient if the surface water system is redirected from a use for irrigation purposes to a use for water storage, groundwater recharge, retiming projects, etc.?

3. What are the impacts of a reduced groundwater allocation to users with comingled supplies?

A significant portion of all the surface water acres in the Basin are also served by groundwater wells. Since the purpose of a groundwater shutdown is to increase stream flow, and wells closer to streams have more immediate impact on flow, wouldn't many irrigation district customers who also have groundwater wells be severely harmed?

4. What are the impacts if groundwater users and surface water users receive the same allocation? What types of supplies available to each type of user?

Should all water users in the Basin have the same allocation? Why?

5. What options, other than augmentation, are there to meet compact compliance today?

If the augmentation projects were shut down and lower allocations were applied to all water users in the Basin and compact compliance was not achieved, what would be alternatives to achieving compact compliance?

6. How can the basin-wide plan deal with impacts to the water supply that are beyond our control?

According to the Department of Natural Resources, almost 60% of the total annual reduction in inflows into Harlan County Lake has been caused by reductions in runoff (171,000 acre feet) and groundwater pumping in Kansas and Colorado (42,000 acre feet), with the rest due to

groundwater pumping in Nebraska. If the purpose of the group is to balance uses and supplies while considering socioeconomic consequences, how do we treat supplies that are beyond our control?

Data Requests:

- Spreadsheet of computed water supply, NE allocation, NE computed beneficial consumptive use, Compact Accounting, groundwater computed beneficial consumptive use, NE groundwater, etc.
- Spreadsheet from each NRD showing average use for possibly the past 10 years, including the Model Domain Area.
- Groundwater level changes in Nebraska – Map for 2015 or 2016 – whichever is most current.
- Nebraska's dry year total water supply (no river flows) acre-feet.
- Total irrigated acres (ground and surface) acres by NRD.
- Dry year imported water supply credit acre-feet by NRD.
- Dry year State Line river flows in acre-feet.
- River flows originating within NRD.
- I would like to see conditions at the time of the settlement and current conditions; i.e., those two detailed groundwater contour maps.
- We need a table of settlement to current history of groundwater pumping, surface water use, estimated and actual compliance numbers, shortage or excess, and whether or not it was a water short year.
- A map of observation well locations to determine if any more are needed. We need to know of any wildlife habitat shortcomings.

Data requests based upon august meeting discussions:

- Balance between recharge and pumping (related to allocations).
- Baseline data (water supply and use).
- Number of surface water and groundwater acres in 10/50 area and 10/5 area.
- Groundwater contour map.
- Groundwater depletions relative to the 10/50 area.