

**U.S. LOTIC WETLAND ECOLOGICAL HEALTH ASSESSMENT FOR
LARGE RIVER SYSTEMS (Survey)**

Record ID No: _____

ADMINISTRATIVE DATA

Unique Location ID: _____ Reach ID: _____

- A1.** Field data collected by: _____
- A2.** Funding Agency/Organization: _____
- A3a.** BLM State Office: _____
- A3b.** BLM Field Office/Field Station: _____
- A3c.** BLM Office Code: _____ **A3d.** Is the polygon in an active BLM grazing allotment? (Yes; No; NA): _____
- If **Yes, A3e.** Allotment Number: _____ **A3f.** Allotment Number: _____
- Allotment ID: _____ Allotment ID: _____
- Allotment Name: _____ Allotment Name: _____
- Management Status: _____ Management Status: _____
- A4.** USFWS Refuge: _____
- A5.** Reservation: _____
- A6.** NPS Park/NHS: _____
- A7.** USFS National Forest: _____
- A8.** Other Location: _____
- A9.** Year: _____ **A10.** Date field data collected: _____ **A11.** Observers: _____
- A12a.** At least some part of this polygon has been inventoried more than once (resampled)? (Yes; No): _____
- If **No**, go to item **A13a.** If **Yes, A12b.** This polygon coincides exactly with another inventoried polygon? (Yes; No): _____
- A12c.** Is this the latest inventory for this polygon? (Yes; No): _____
- A12d.** ID No.(s) of other inventories of this polygon: _____, _____, _____, _____, _____
- A12e.** Other years: _____
- A12f.** This polygon shares common area with other inventoried polygon(s)? (Yes; No): _____ **A12g.** Other years: _____
- A12h.** ID No.(s) of other records sharing area with this polygon: _____, _____, _____, _____, _____
- A13a.** Has a change in management occurred? (Yes; No): _____ If **Yes, A13b.** Year that changed occurred: _____
- A13c.** Type of management change applied: _____
- _____
- _____
- _____

LOCATION DATA

- B1.** State/Province: _____ **B2.** County/Municipal district: _____
- B3.** Allotment/Range/Management unit: _____
- B4a.** Area name: _____
- B4b.** Tributary to: _____
- B4c.** Group name: _____ **B4d.** Group number: _____ **B5.** Polygon number: _____
- B6a.** Upper end elevation (ft): _____ ; (m): _____ **B6b.** Lower end elevation (ft): _____ ; (m): _____
- B7.** Stream gradient (percent): _____ %
- B8a.** Polygon latitude/longitude coordinates: GPS Projection: _____
- | | Deg | Min | Sec | N/S | Decimal | Deg | Min | Sec | E/W | Decimal | Accuracy
+/- ft | Observer
Initial
+/- m & WPT |
|-------------|-------|-------|-------|-------|---------|------|-------|-------|-------|---------|--------------------|------------------------------------|
| Upper: Lat: | _____ | _____ | _____ | _____ | _____ | Lon: | _____ | _____ | _____ | _____ | _____ | _____ |
| Lower: Lat: | _____ | _____ | _____ | _____ | _____ | Lon: | _____ | _____ | _____ | _____ | _____ | _____ |
| Other: Lat: | _____ | _____ | _____ | _____ | _____ | Lon: | _____ | _____ | _____ | _____ | _____ | _____ |
- B8b.** Other Point _____
- Comments: _____
- _____
- _____

B9. Hydrologic unit code(s) (HUC) from the USGS National Hydrography Dataset (NHD): Record ID No: _____

HUC LEVELS: Region (2 digits; First Level HUC); Subregion (4 digits; Second Level HUC); Basin (6 digits; Third Level HUC); Subbasin (8 digits; Fourth Level HUC); Watershed (10 digits; Fifth Level HUC); and Subwatershed (12 digits; Sixth Level HUC)

HUC #1: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

HUC #2: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

HUC #3: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

HUC #4: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

HUC #5: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

HUC #6: _____
River Miles: _____
Percent of Stream Reach: _____
Region Name: _____
square miles: _____
Subregion Name: _____
square miles: _____
Basin Name: _____
square miles: _____
Subbasin Name: _____
square miles: _____
Watershed Name: _____
square miles: _____
Subwatershed Name: _____
acres: _____

SELECTED SUMMARY DATA

Unique Location ID: _____ Record ID No: _____

C1. Wetland type: _____ **C2.** Polygon size (ac): _____ ; (hect): _____

C3a. Is the entire polygon upland? (Yes; No): _____ If **No**, **C3b.** Does the polygon consist entirely of functional wetland types? (Yes; No): _____ **C3c.** Functional wetland (ac): _____ ; (hect): _____ **C3d.** Percent of total polygon: _____

C4. Channel length (mi): _____ ; (km): _____ **C5.** Number of river miles the polygon represents: _____ ; (km): _____

C6a. Average polygon width (ft): _____ ; (m): _____

C6b. Polygon width range (ft): _____ to _____ ; (m): _____ to _____

C7. Habitat Types and Community Types

Classification Type Name	Phase	Approx. Percent of Polygon	Successional Stage or Comments
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

C8a. Is there evidence that part, or all, of the polygon has burned (e.g., charred wood, dead standing trees or shrubs, etc.)? (Yes; No; NC): _____

If **Yes**, **C8b.** Approx. how long ago? (0 to 5 years ago; more than 5 years ago): _____

C8c. Percent of polygon that was burned? (0-25%; 26-50%; 51-75%; 76-100%): _____

ADDITIONAL PHYSICAL SITE CHARACTERISTICS

C9. Polygon Has Tall Woody Type(s) (Yes, No): _____

RIVER ECOLOGICAL HEALTH SCORE SHEET

Record ID No: _____

Unique Location ID: _____

	Actual Score	Possible Score	Comment
1. Cottonwood and Poplar Regeneration from seed	_____	_____	_____
2. Regeneration of other Native Tree Species	_____	_____	_____
3. Regeneration of Preferred Shrub Species	_____	_____	_____
4. Standing Decadent and Dead Woody Material	_____	_____	_____
5a. Browse Util. of Preferred Trees and Shrubs	_____	_____	_____
5b. Woody Veg. Removal other than Browsing	_____	_____	_____
6. Total Canopy Cover of Woody Species	_____	_____	_____
7a. Total Canopy Cover of Invasive Plant Species	_____	_____	_____
7b. Density/Distribution Pattern of Invasive Plant Species	_____	_____	_____

Are invasive species present? (Yes; No; NC): _____

List Invasive Plant Species present, including Percent Canopy Cover and Density Distribution Class:

	Can.Cov.	Dens.	Dist.		Can.Cov.	Dens.	Dist.		Can.Cov.	Dens.	Dist.
black henbane:	_____	_____	_____	field scabiosa:	_____	_____	_____	prickly Russian thistle:	_____	_____	_____
broadleaved pepperweed:	_____	_____	_____	field sowthistle:	_____	_____	_____	purple loosestrife:	_____	_____	_____
bull thistle:	_____	_____	_____	flowering-rush:	_____	_____	_____	Russian knapweed:	_____	_____	_____
burningbush:	_____	_____	_____	Fuller's teasel:	_____	_____	_____	Russian olive:	_____	_____	_____
butter and eggs:	_____	_____	_____	houndstongue:	_____	_____	_____	saltcedar (tamarisk):	_____	_____	_____
Canada thistle:	_____	_____	_____	leafy spurge:	_____	_____	_____	Scotch cottonthistle:	_____	_____	_____
cheatgrass:	_____	_____	_____	lesser burdock:	_____	_____	_____	spotted knapweed:	_____	_____	_____
common tansy:	_____	_____	_____	medusahead:	_____	_____	_____	St. John's wort:	_____	_____	_____
Dalmatian toadflax:	_____	_____	_____	nodding plumeless thistle:	_____	_____	_____	sulphur cinquefoil:	_____	_____	_____
diffuse knapweed:	_____	_____	_____	North Africa grass:	_____	_____	_____	tall buttercup:	_____	_____	_____
Dyer's woad:	_____	_____	_____	orange hawkweed:	_____	_____	_____	whitetop:	_____	_____	_____
field bindweed:	_____	_____	_____	oxeye daisy:	_____	_____	_____	yellow starthistle:	_____	_____	_____
field brome:	_____	_____	_____	paleyellow iris:	_____	_____	_____				

8. Disturbance-increaser Undesirable Herbaceous Species _____

Vegetation Subtotal: _____

RIVER HEALTH EVALUATION (continued)

- 9. Riverbank Root Mass Protection _____
- 10. Human-Caused Bare Ground _____
- 11. Removal or Addition of Water from/to the River System _____
- 12. Control of Flood Peak and Timing by Upstream Dam(s) _____
- 13. Riverbanks Structurally Altered By Human Activity _____
- 14. Human Physical Alteration to the Rest of the Polygon _____
- 15. Floodplain Accessibility within the Polygon _____

Soil / Hydrology Subtotal: _____

Overall Polygon Total: _____

RATING CALCULATION

(Actual Score/Possible Score) X 100 = Rating Percent		Descriptive Category
Vegetation Rating:	_____ / _____ x100 = _____	_____
Soil / Hydrology:	_____ / _____ x100 = _____	_____
OVERALL:	_____ / _____ x100 = _____	_____

<u>Rating Percent Range</u>	<u>Descriptive Category</u>
80-100	<i>Proper Functioning Condition (Healthy)</i>
60-79	<i>Functional At Risk (Healthy, but with Problems)</i>
<60	<i>Nonfunctional (Unhealthy)</i>

PHOTOGRAPH DATA

Photographer(s): _____

E1. Identification of photos taken at the *Upstream End of Polygon*:

Photo Location: Deg Min Sec N/S Decimal Deg Min Sec E/W Decimal
 Lat: _____ Lon: _____

Photo Direction (degrees): _____

Photo nos.: (*Looking Upstream*): _____

Photo Description (If necessary): (*Looking Upstream*):

Photo nos.: (*Looking Downstream*): _____

Photo Description (If necessary): (*Looking Downstream*):

E2. Identification of photos taken at *Downstream End of Polygon*:

Photo Location: Deg Min Sec N/S Decimal Deg Min Sec E/W Decimal
 Lat: _____ Lon: _____

Photo Direction (degrees): _____

Photo nos.: (*Looking Upstream*): _____

Photo Description (If necessary): (*Looking Upstream*):

Photo nos.: (*Looking Downstream*): _____

Photo Description (If necessary): (*Looking Downstream*):

E3. Additional Locations: (Lat/Lon DMS and Decimal Degrees [WGS 84]; Observer Initial and Waypoint Number)

Observer
Initial
& WPT

Location #1: Lat: _____ Lon: _____

Photo Direction at **Location #1** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #1**): _____

Photo Direction at **Location #1** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #1**): _____

Photo Direction at **Location #1** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #1**): _____

Photo Direction at **Location #1** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #1**): _____

Location #2: Lat: _____ Lon: _____

Photo Direction at **Location #2** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #2**): _____

Photo Direction at **Location #2** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #2**): _____

Photo Direction at **Location #2** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #2**): _____

Photo Direction at **Location #2** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #2**): _____

Location #3: Lat: _____ Lon: _____

Photo Direction at **Location #3** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #3**): _____

Photo Direction at **Location #3** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #3**): _____

Photo Direction at **Location #3** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #3**): _____

Photo Direction at **Location #3** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #3**): _____

Location #4: Lat: _____ Lon: _____
Photo Direction at **Location #4** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #4**): _____
Photo Direction at **Location #4** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #4**): _____
Photo Direction at **Location #4** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #4**): _____
Photo Direction at **Location #4** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #4**): _____

Location #5: Lat: _____ Lon: _____
Photo Direction at **Location #5** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #5**): _____
Photo Direction at **Location #5** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #5**): _____
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Photo Numbers: _____
Photo Description (If necessary): (**Location #5**): _____
Photo Direction at **Location #5** (degrees): _____
Photo Numbers: _____
Photo Description (If necessary): (**Location #5**): _____

Location #6: Lat: _____ Lon: _____

Photo Direction at **Location #6** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #6**): _____

Photo Direction at **Location #6** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #6**): _____

Photo Direction at **Location #6** (degrees): _____

Photo Numbers: _____

Photo Description (If necessary): (**Location #6**): _____

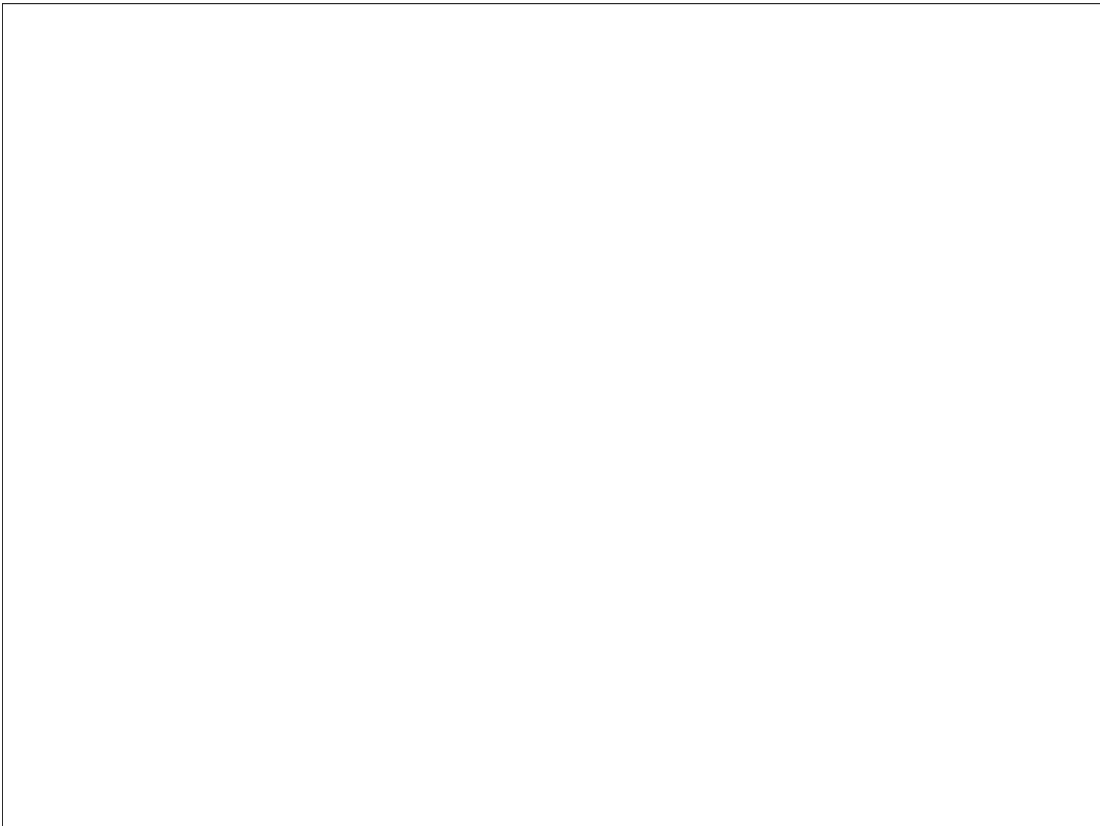
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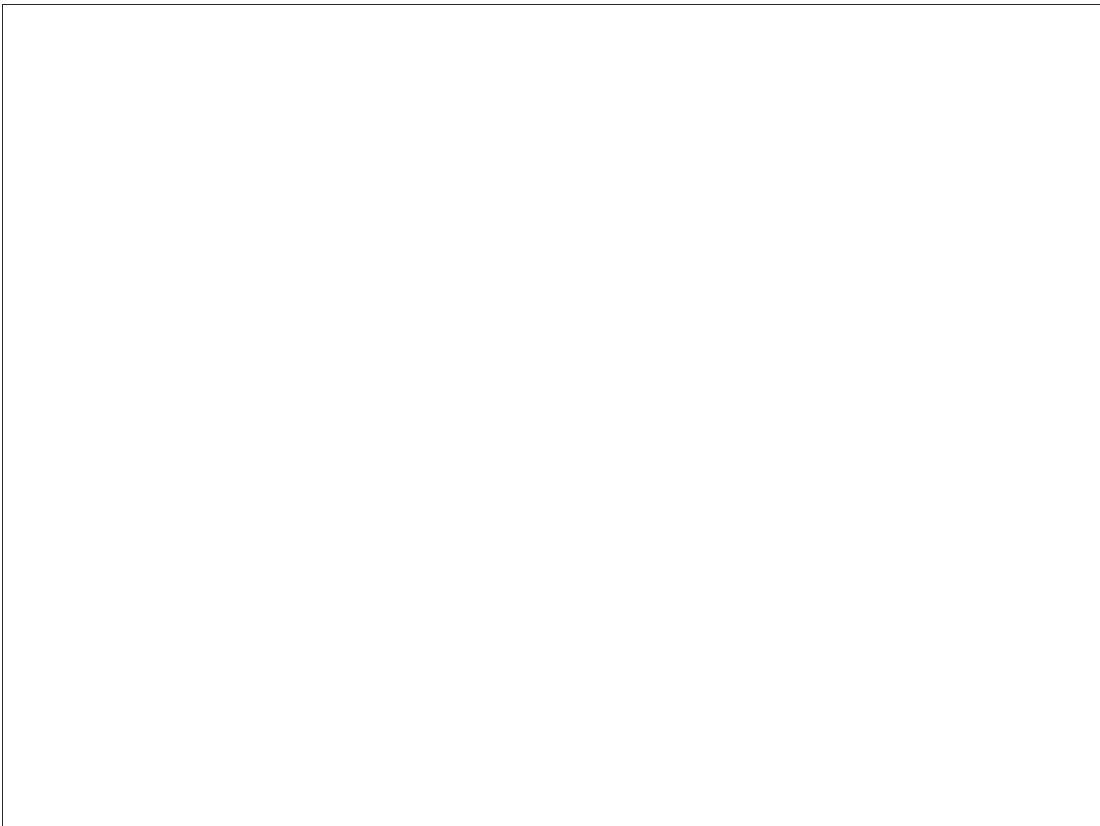
Photo Numbers: _____

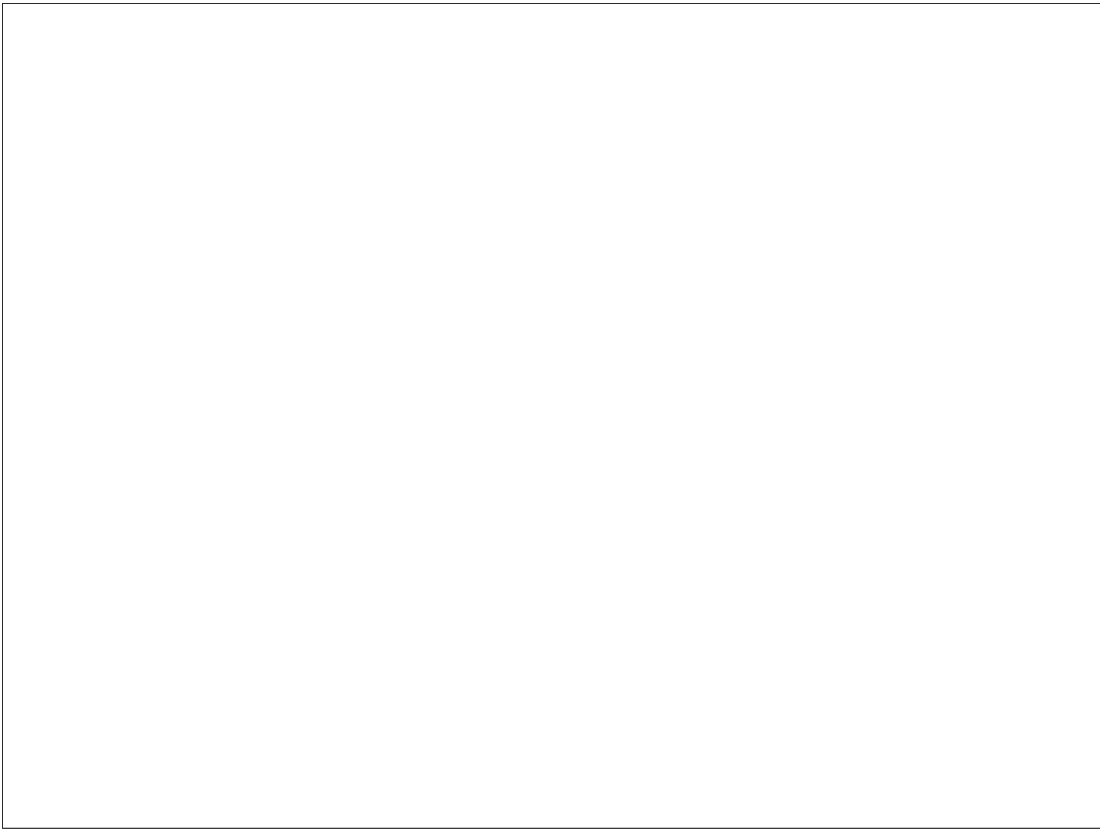
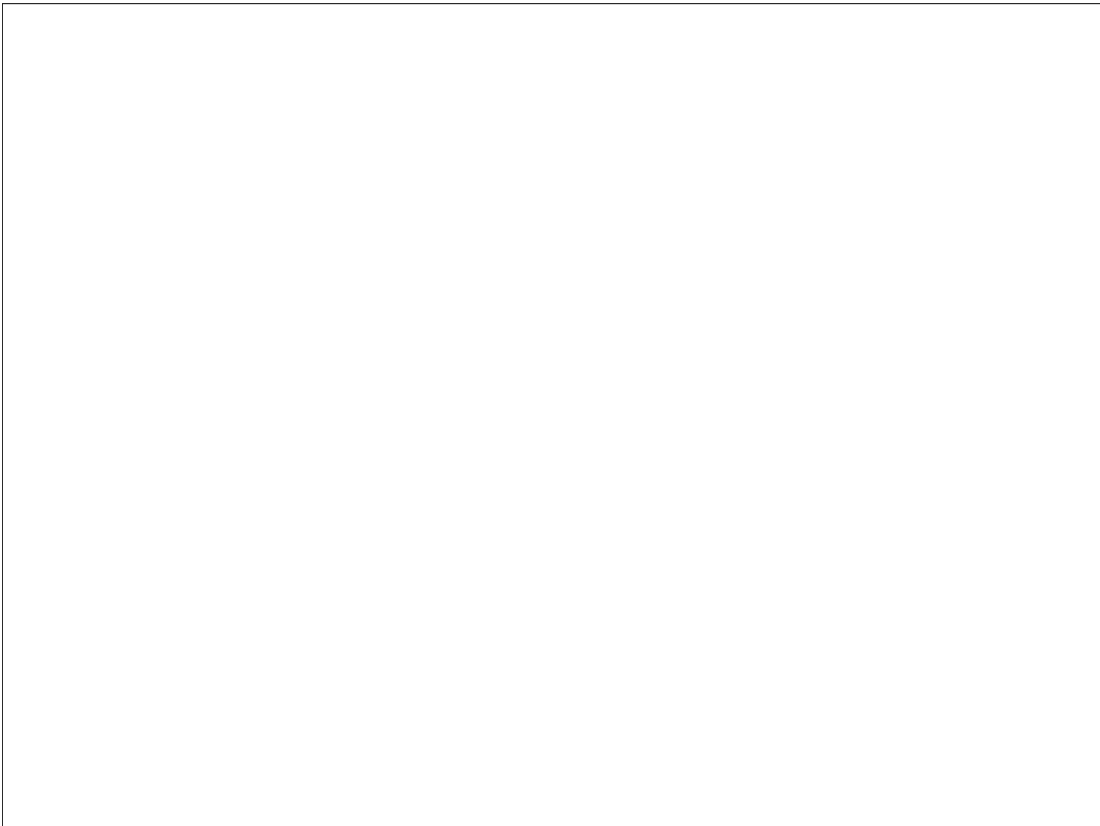
Photo Description (If necessary): (**Location #6**): _____

A large, empty rectangular box with a thin black border, occupying the upper half of the page. It is intended for data entry or a drawing.A second large, empty rectangular box with a thin black border, identical in size and position to the one above, occupying the lower half of the page. It is also intended for data entry or a drawing.

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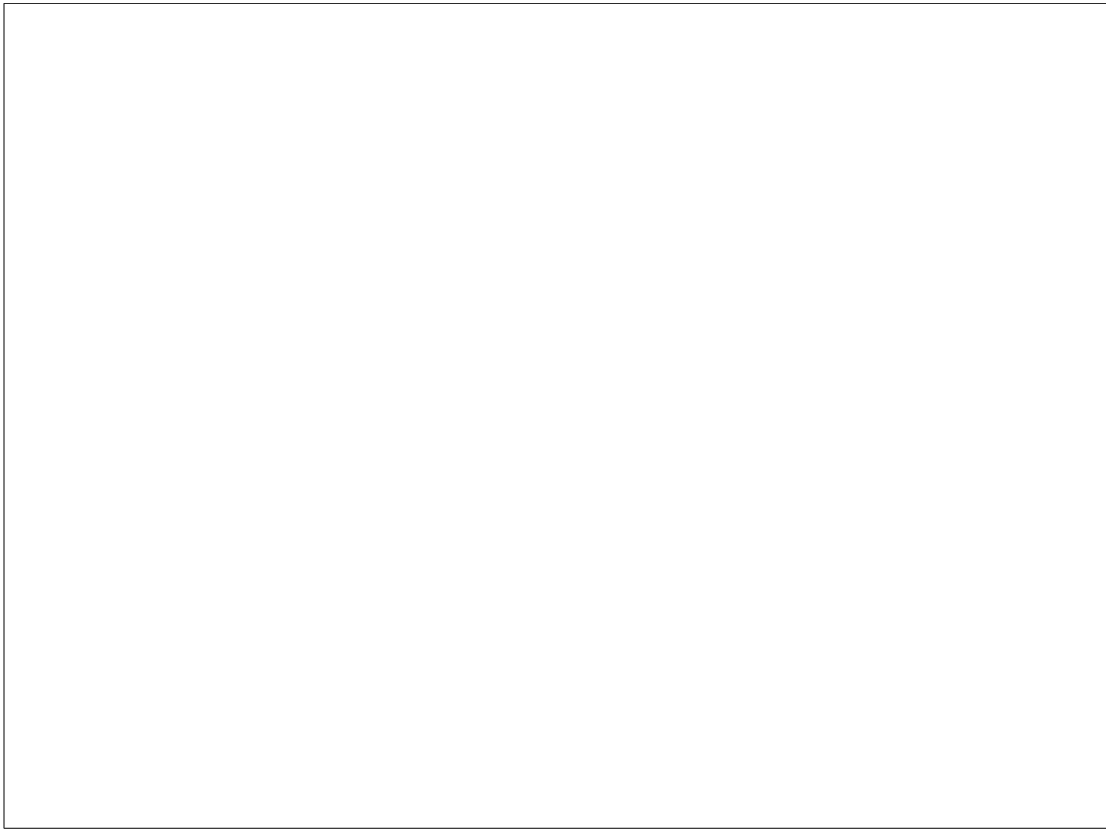
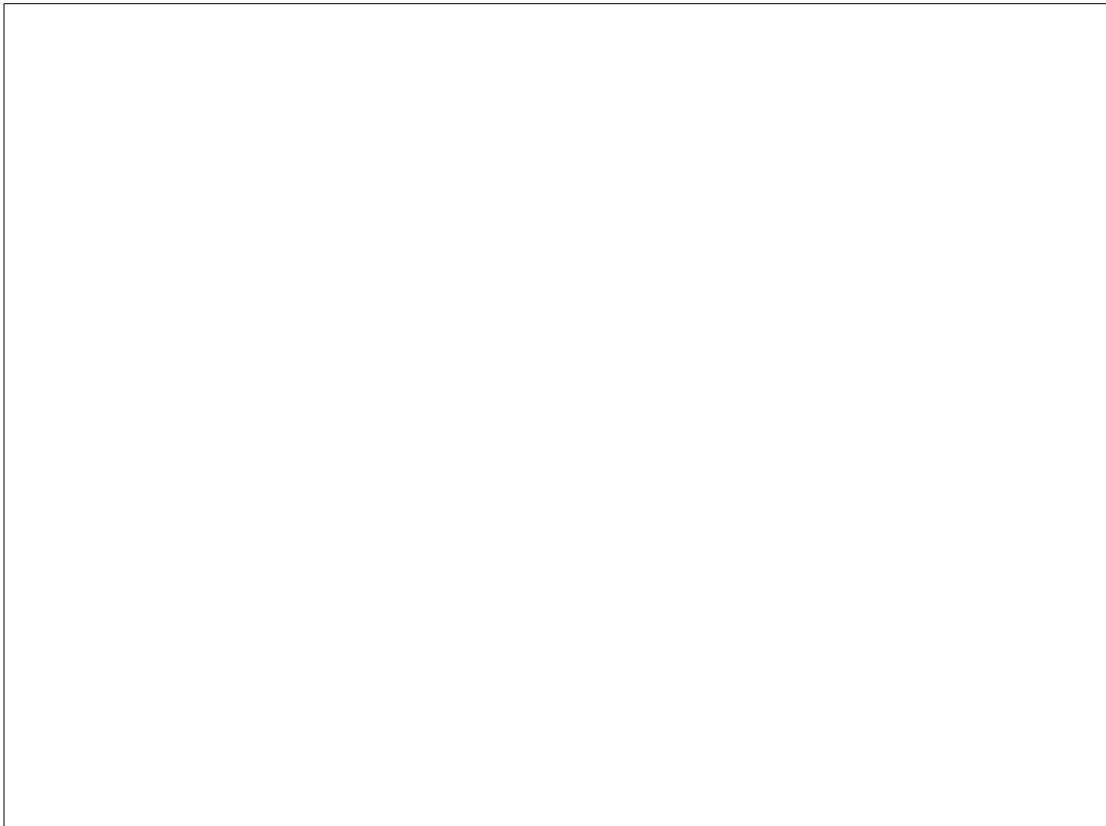


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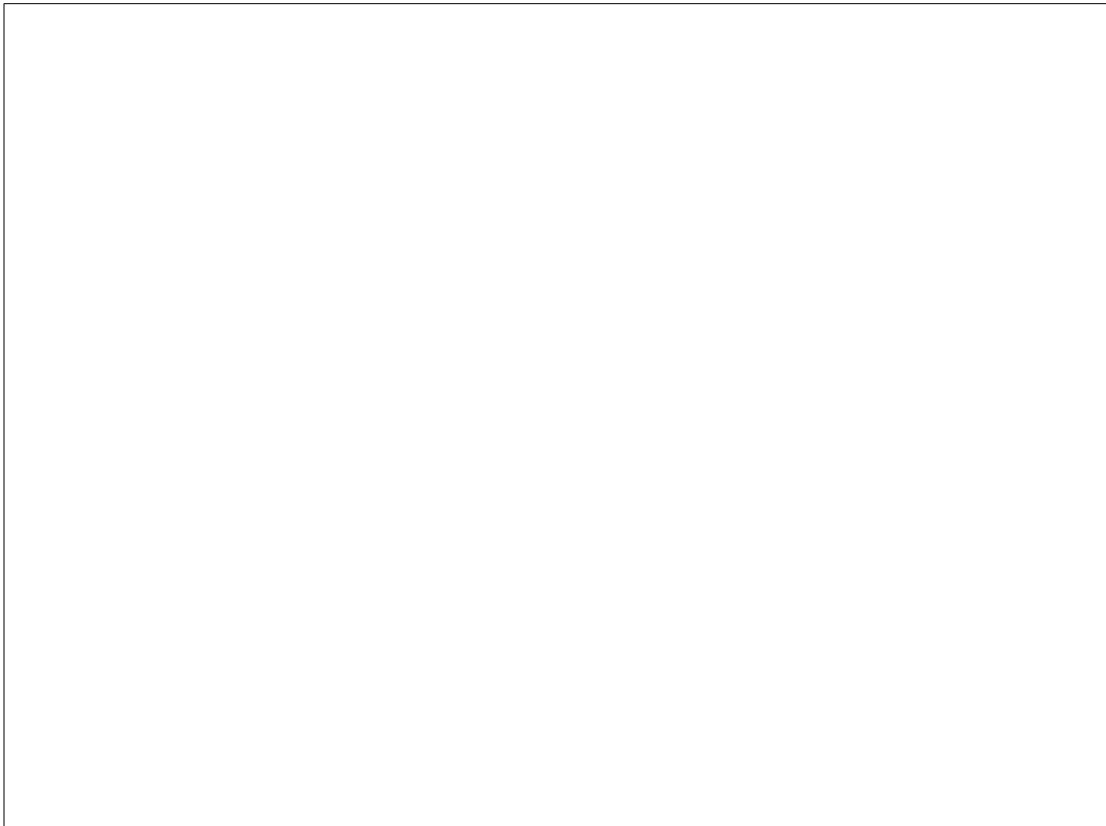
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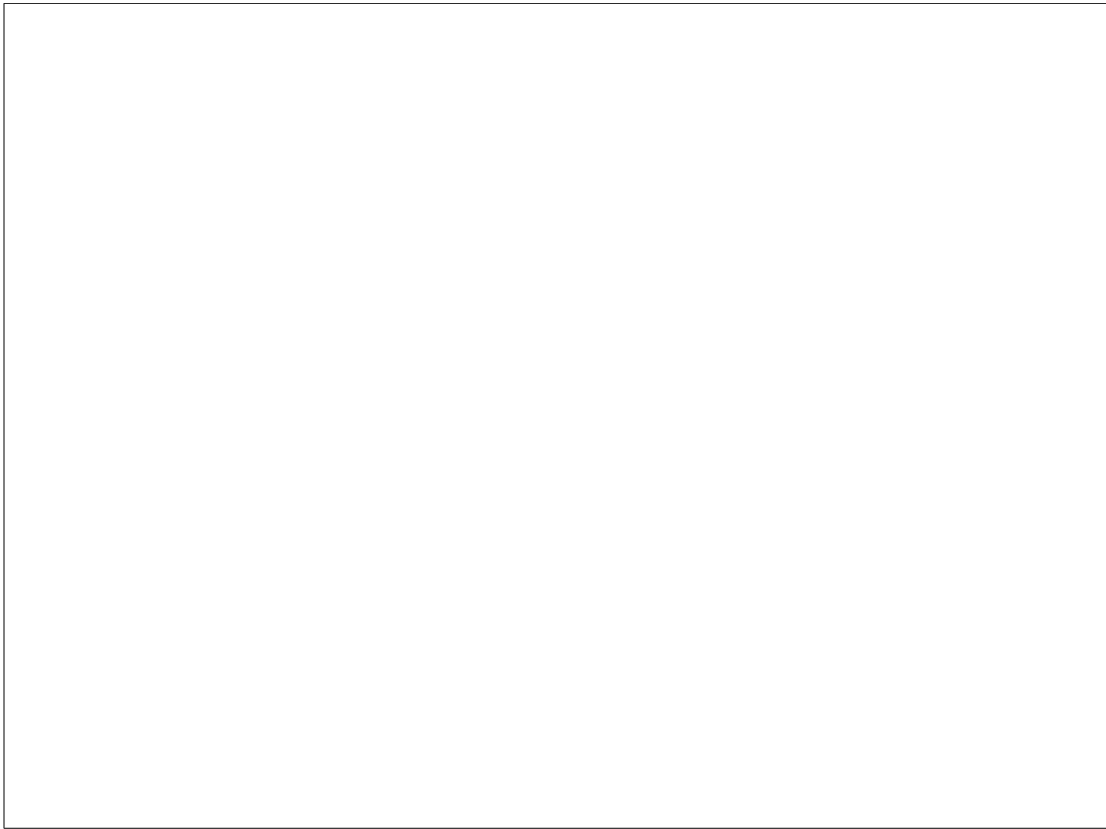
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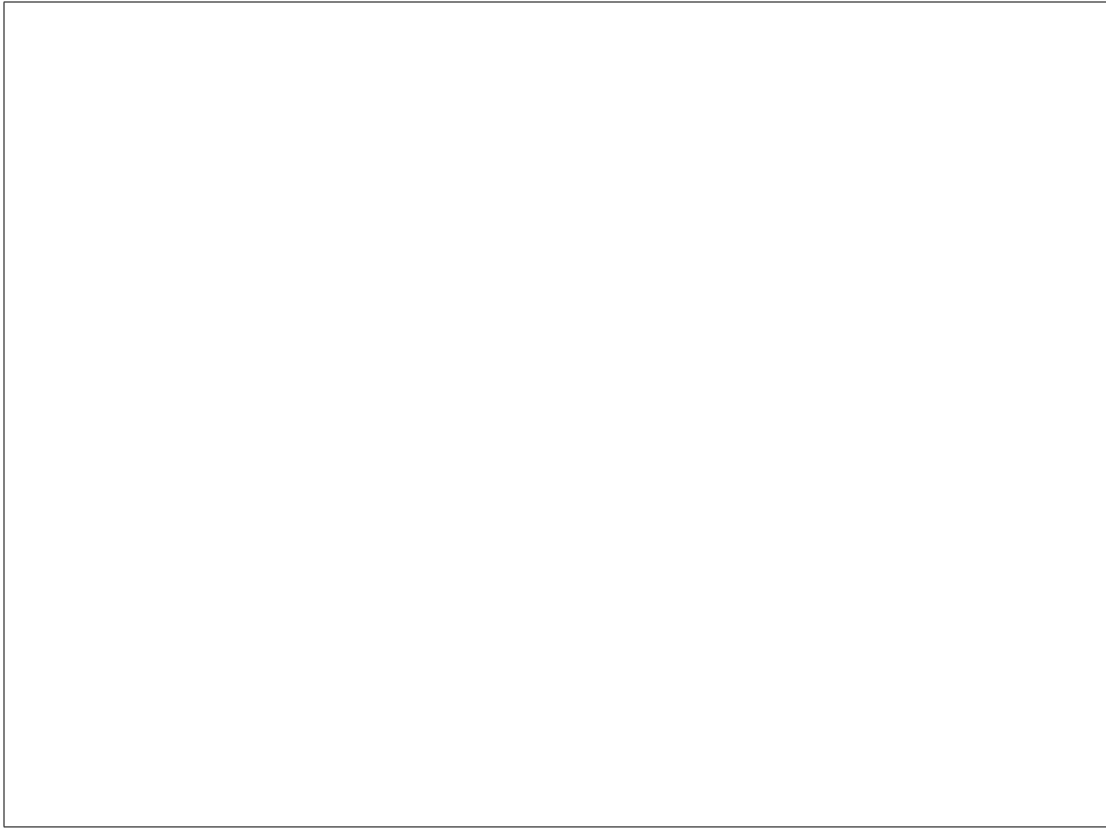
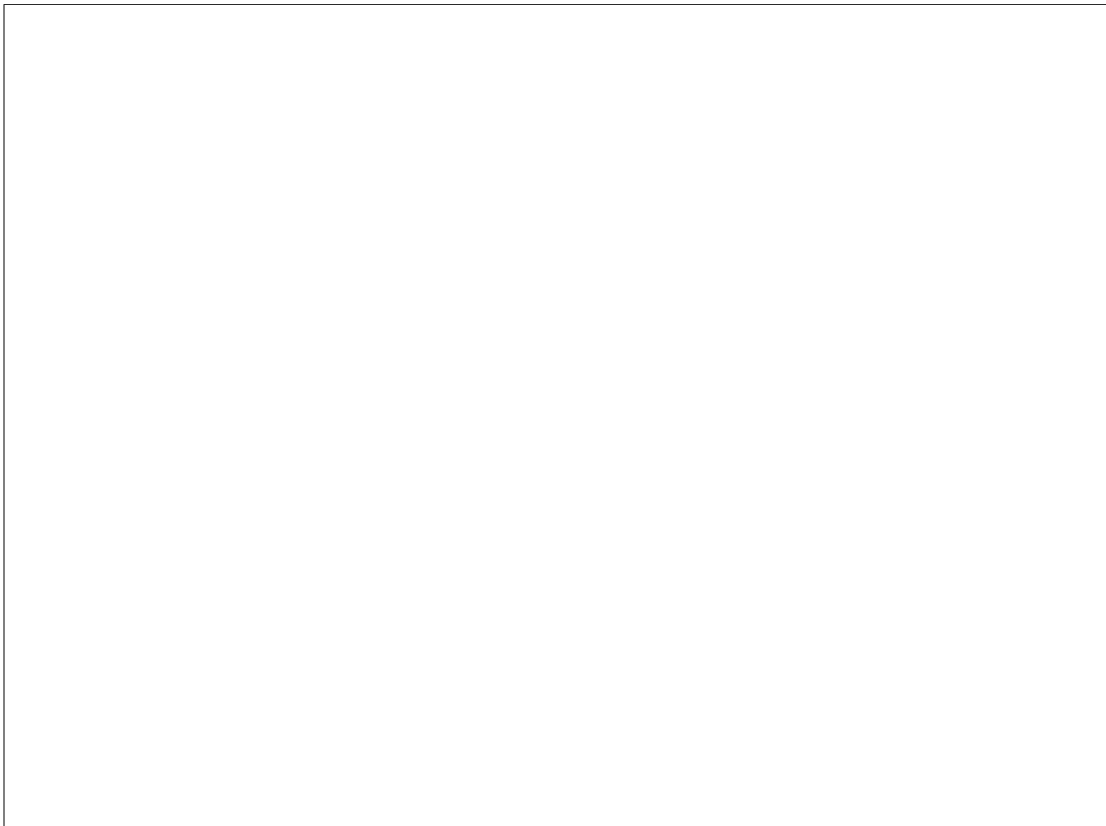
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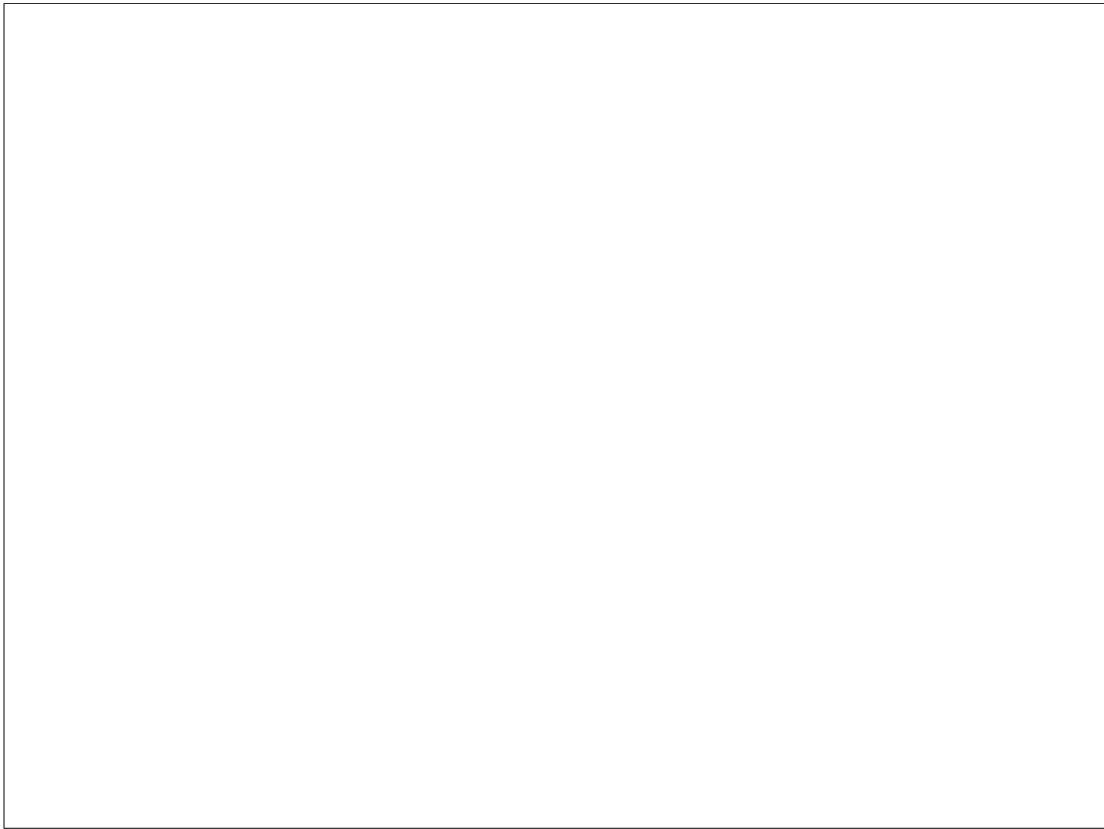
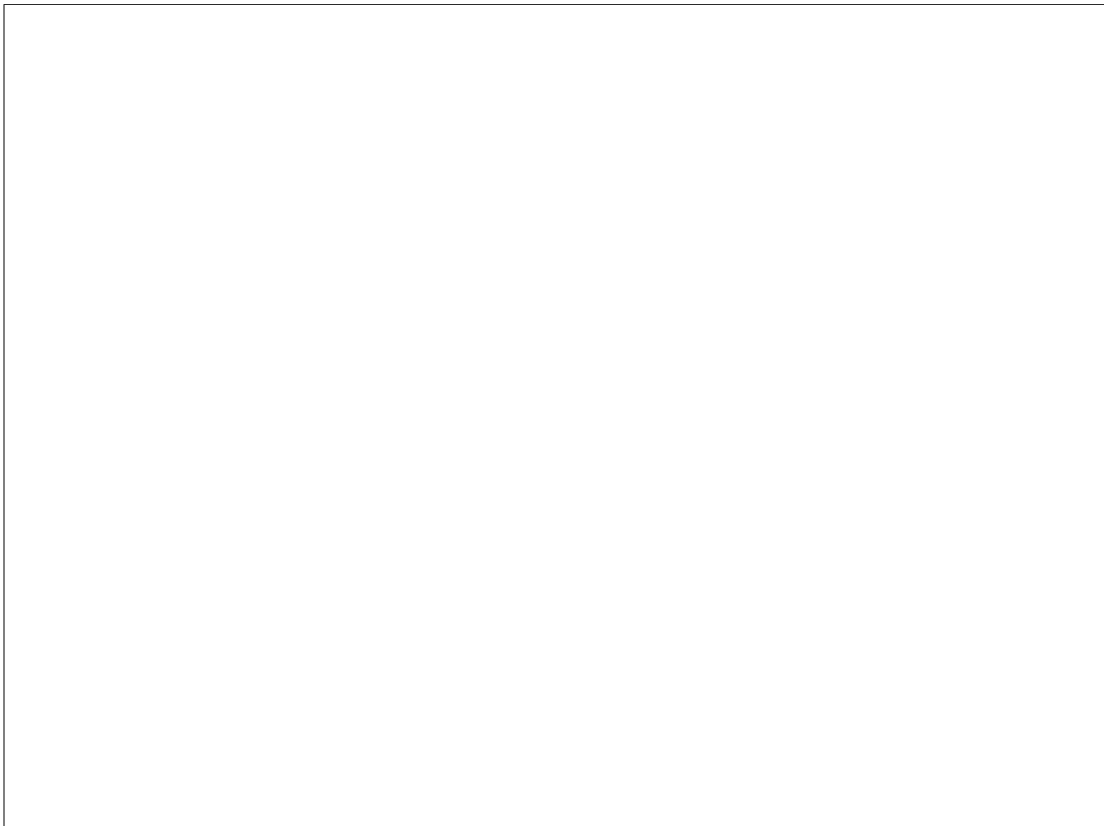


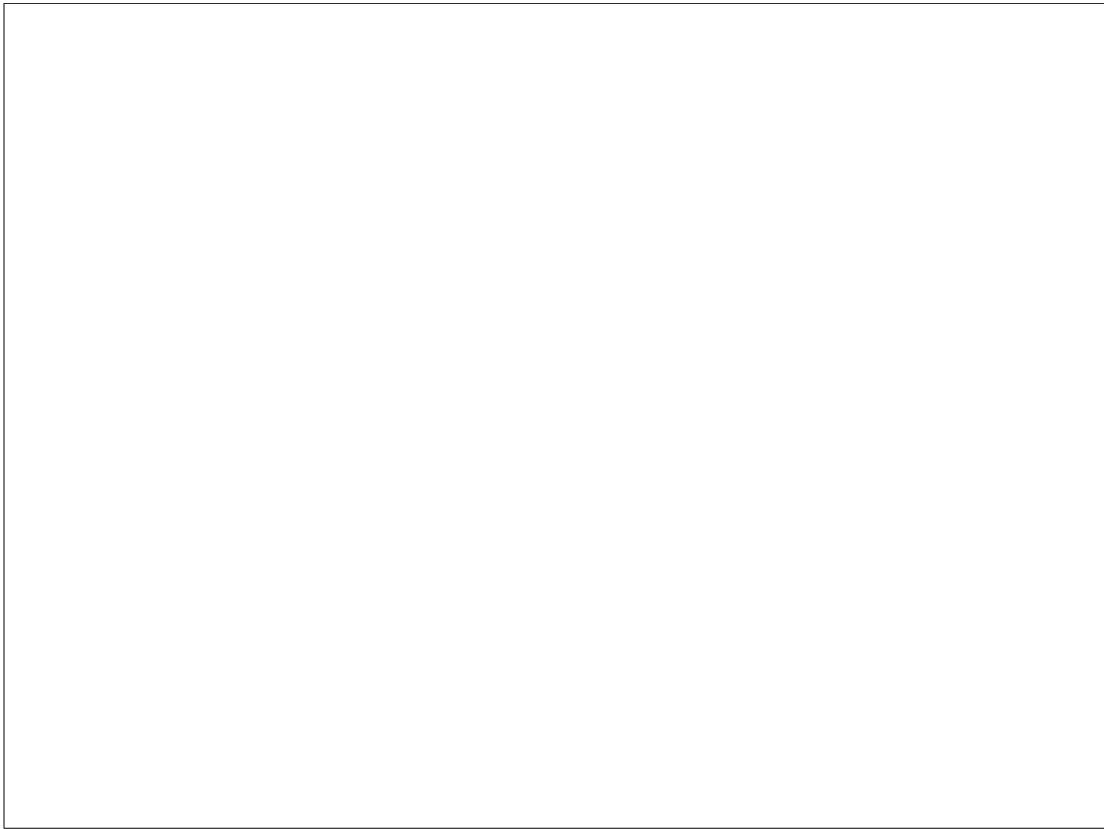
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