



38 groups focused only on one or the other (especially in the utopia/dystopia groups).  
39

40 Notes from breakout groups

41

42 **Wingra Scenarios Workshop**

43

44 **Memorial Union, University of Wisconsin-Madison**

45 **2 March 2007**

46

47

48 **Utopia/Dystopia Groups**

49 (\* Indicates scribe for group)

50

51

52 **Group 1: Utopia** (Oonsie Biggs, Nick Preston\*, Paul West)

53

54 Utopia defined by the Wingra goals being met

55 Madison as the world's model city with greenest mayor in the country

56

57 City defines self as best-to-live-in, preferable to nomination by outside agency

58 Mayor's vision gets implemented and launched at public event

59 Star-gazing shows safe night and day -> public event celebrating lakes with star gazing  
60 and story-telling about the past (days in the past when lake stunk etc.)

61 Nostalgia for the old polluted days

62

63 Some big catastrophe in 2009 promotes action

64 Got people to think about what they were losing

65 Maybe, salt truck and chlorine truck collide

66 Catalyzes change

67 Then Mayor has event to celebrate the restoration efforts

68 Celebrate end of big clean-up

69 Folks realize not that hard to clean-up therefore do it to all the lakes in the city

70 Perhaps salt and crude petrol more plausible

71 People realize what they lost

72

73 Next event after 2 dozen years of progress

74 Extremists take control and environmentalists lynch them from the capitol flag pole  
75 or things are going well

76

77 Madison goes towards utopia -> but, conservatives gain foothold as backlash to new  
78 landuse policies, clean-up costs, and big-government for technogarden causes shift in  
79 political environment then shifts twds adaptive mosaic  
80  
81 Eco firms getting too ingrained in the political spectrum and start influencing policy and  
82 complaining about lack of eco problems  
83 Celebration then strong laws ... regulating companies and get backlash others want  
84 freedom for free enterprise that lead to technogarden  
85 Stricter and stricter regs although environment getting better  
86 Eco reaction to disaster = overly strong eco companies and top down regs  
87 Eco gaza - start bulldozing houses for to increase shoreline buffer  
88 Environment improves but social conditions degenerate - no more access  
89 Governance and fraud with eco contracts  
90 Fewer people use the lake = decrease in support for the policies because citizens removed  
91 from Watershed  
92  
93 Community gets control and access back through consensus and group plannig  
94 Perhaps, utopia too unrealistic ... therefore need to demonstrate that it is still precarious  
95 (Moral of the story Utopia is fragile)  
96  
97 Newspaper headlines (see presentation for more accurate time-line)  
98 2008 Mayor's calls for eco reform get lukewarm reception  
99 2010 Stinky slurry of salt and crude smothers Lake Wingra  
100 2010 As clean-up begins city turns to the Mayor for eco-leadership  
101 2012 Festival to celebrate re-opening and Mayor's vision  
102 2015 Local start asking when can I fish again  
103 2017 Wingra eco boundaries expanded, eviction notices served  
104 2018 Conservatives take council - 1st time in decades  
105 2010 Record contracts awarded to clean up Wingra  
106 2020 Lake looks great from affar - Eco firms solidify hold on lake access  
107 2025 Counter-reaction to eco-firms: community takes back the lake  
108 2035 Madison world's greanest city - 100 flights daily as eco tourists swarm Wingra  
109

110 **Broad storyline** (Oonsie's notes)

- 111 ♦ Big disaster: Salt and petrol trucks collide, leading to a major spill into Lake Wingra  
112 and decimation of most aquatic life.
- 113 ♦ City implements a major clean-up operation, and introduces stringent regulation to  
114 prevent future disasters and to increase speed of recovery.
- 115 ♦ ~5 years later: Big festival to celebrate reopening of Lake Wingra. The outcome of  
116 the disaster was to make the public much more aware of the value of the lake, and to  
117 reinstate a community memory of what the lake used to be like in the early 1900s.  
118 However, regulations remain very stringent and public access and use is limited.
- 119 ♦ A major eco-rehab industry has grown up around the clean-up of Lake Wingra, and is  
120 not content to lay off now that Wingra is partially recovered. Rehab industry lobbies  
121 with the City Council to continue restoration efforts and implement increasingly  
122 ambitious recovery plans for Lake Wingra and the other Madison lakes. This drives  
123 increasingly restrictive use and access policies and fuels development of aquatic  
124 rehab technology, for which Madison becomes a national center of expertise.
- 125 ♦ Although Lake Wingra is in better ecological condition than it has been in many  
126 decades, the community is increasingly restricted and excluded from using the lake.  
127 Eventually this leads to a backlash from the community, who demand access and use  
128 of the lakes. A formal governance body for Lake Wingra is established, which  
129 includes representatives from government, the community, and the eco-rehab  
130 industry. A major task of the governance body is to balance the ecological restoration  
131 objectives against access and use by the community.
- 132 ♦ 2035: Madison has become a model green city and attracts large numbers of people,  
133 which presents a new threat to the lake. The Lake Wingra governance council realizes  
134 that maintaining the lake in a desirable condition requires continual adaptation and  
135 hard work – utopia is not a state that simply maintains itself once it is reached.
- 136 ♦ Moral of the scenario: Utopia is not only having Lake Wingra healthy ecologically; it  
137 also has a strong social dimension of community involvement and support.  
138 Furthermore, utopia is fragile – one cannot simply assume that “everyone lives  
139 happily ever after”.

140

141 **Group 2: Utopia** (Brian Weidel, David Zaks\*, Matt van de Bogert, Brenda Baker)

142

143 ***Headlines (chronological order):***

- 144 ♦ Wingra leaf /algae compost used to grow award winning tomato
- 145 ♦ Raingardens create win-win for carbon and water in Wingra watershed
- 146 ♦ Last carp from Wingra eaten at benefit dinner at
- 147 ♦ Harvest Star-gazing conference brings thousands to wingra shore
- 148 ♦ Wingra friends success viral, county and state water protection group formed
- 149 ♦ Last hold-out Arboretum homeowner accepts \$10million, ecosystem restoration
- 150 begins
- 151 ♦ Wingra bottom visible first time in 50 years
- 152 ♦ Friends of Lake Wingra Awarded for having 'Healthiest Lake'
- 153 ♦ Wingra water rivals Evian as 'purest' water, sold locally to fund restoration projects
- 154 ♦ Oscar Mayer awards \$20 million gift for restoration, community development to
- 155 Wingra group
- 156 ♦ Ivory-billed woodpecker makes nest on Wingra shore
- 157 ♦ Center for Limnology turned into museum, lake problems solved

158

159 ***Invasives***

- 160 ♦ Milfoil and carp controlled, zebra mussels prevented from entering
- 161 ♦ Potential for GMO invention to rid of invasives (safety?)
- 162 ♦ UV radiation at every boat launch to decrease potential to introduce new invasives

163

164 ***Ecology***

- 165 ♦ Rare species now abound in lake, either reintroduced, habitat altered for their benefit
- 166 ♦ Elimination of goose problem--> fewer geese will reduce direct pollution to lake. Not
- 167 'killed' but herded to other, better habitats in the area that are less sensitive to nutrient
- 168 influx

169

170 ***Development / Technology***

- 171 ♦ Arboretum remains undeveloped, potential for infringing development to be halted,
- 172 reverted to natural lands.
- 173 ♦ Houses currently in fragile places in arboretum "gracefully removed" and ecosystem
- 174 services restored
- 175 ♦ A car-free arboretum? Install solar powered trolley instead. Raingardens installed
- 176 pervasively to increase groundwater recharge and decrease runoff

- 177 ♦ Development issues: up, not out. Acknowledge that increase population will need to
- 178 be put somewhere
- 179 ♦ All pavement converted to be of permeable type
- 180 ♦ Development follows new urbanism model
- 181 ♦ Leaves--> community composters installed

182

### 183 *Drivers of Policy Change*

- 184 ♦ Other catalyst (dead fish, climate catastrophe...) leads to massive change
- 185 ♦ Water quality / quantity goes to shit in the rest of the midwest,
- 186 ♦ wingra water becomes valuable commodity
- 187 ♦ Climate change at a global level trickles down to local level to bring environmental
- 188 awareness

189

### 190 *Policy*

- 191 ♦ Madison becomes hotbed for green technology
- 192 ♦ Ecosystem sponsorship? re-naming of lake?
- 193 ♦ Local schools integrate watershed into curriculum

194

195

### 196 **Group 3: Dystopia** (Anne Forbes, Chris Uejio\*, Matt Kornis, John Pohlman)

197

### 198 *Headlines*

- 199 2010: Death Toll from West Nile virus continues to rise amid concerns about
- 200 microcystin toxin. Citizens demand flushing runoff directly into lakes.
- 201 University funding cut; Arboretum sold for development to increase UW
- 202 endowment.
- 203 WAR! War declared on Korea as conflict in Iran drags on. EPA disbanded in
- 204 new budget plan.
- 205 2025: Chicago youth wins annual carp fishing tournament; Weird fish caught in
- 206 tournament confirmed by local expert Brian Weidel as "bluegill"
- 207 New gondola and airboat fleet allows access to Lake Wingra once more
- 208 UW Scientist introduces estuarine species to increase salty Wingra's biodiversity
- 209 2035: Rejoicing as Cubs win world series
- 210 Arboretum shoreline 80% summer homes
- 211 Part-time residents clog interstate returning to Chicago to vote
- 212 Fertilizer plant opens today, spinning goose droppings, carp, and algae into gold.

213

214 ***Scribe notes***215 Today216 *Economics*: Competing macroeconomic costs reduce state services217 *Health*: Epidemics mosquitoes, disease, bacteria => pressure to dry retention ponds,  
218 channel runoff directly into lake

219

220 2010221 *Recreation*: Loss of social relationship to outdoors (fishing/swimming)222 *Economics*: Funding for university cut, Arboretum, Edgewood, surrounding properties  
223 sold developed224 *Ecological*: Geese droppings decrease recreation

225

226 2025:227 *Ecological*: Simplified lake ecology (carp, minnows, algae)

228 Loss of ash trees in watershed, initiates positive feedback &amp; reducing forest cover

229

230 2035:231 *Recreation*: Recreational opportunities reduced (only use gondolas, airboats)232 *Ecological*: Impossible or economically impractical to restore ecology or full lake  
233 sedimentation; Continual loss of trees as temperature and runoff increases

234

235

236 **Group 4: Dystopia** (Matt Diebel, Justin Fox, Jennifer Schmitz\*, John Nicol)

237

238 *2010 -- Zebra Mussels Invade Lake Wingra*239 Lake Wingra is invaded by zebra mussels, despite efforts of FOLW, the City Parks, and  
240 the University to keep them out. Available funding for the lake is already tied up in other  
241 activities, and the issue is not able to be addressed immediately... The public views the  
242 increased water clarity as a benefit despite efforts of FOLW to convey the fact that other  
243 native species inhabiting the lake are being compromised by the presence of zebra  
244 mussels. People's attitudes about sustaining a "healthy" lake start to shift, not only do  
245 they question FOLW's priorities, they perceive the additional invader as evidence that  
246 despite efforts to control non-natives, there is nothing that can really be done to prevent  
247 them from establishing, therefore general support for local NGO groups like FOLW  
248 begins to decline amidst some bad press and a few outspoken individuals.

249

250 *2015 -- University of Wisconsin-Madison Lays-Off 2,000 Staff*

251 Following the nation's preoccupation with Iraq in the first decade of the new millennium,  
252 the administration proceeds to shift its attention to Syria and Iran, dedicating continued  
253 funding and personnel to securing democracy in the Middle East. This continues to strain  
254 the nation's economy, which is also facing a steady exodus of high-tech talent to India  
255 and China. Increasing anti-American sentiment abroad and less welcoming of foreigners  
256 at home due to the continued 'war on terrorism' climate diminishes the enrollment of  
257 international students in American universities. The combination of decreased state  
258 funding, lower enrollment, and lower recruitment of professors in technology fields  
259 forces the University to lay off a total of 2,000 staff persons ranging from supportive  
260 administrative positions to professors in departments such as the Humanities that rely  
261 heavily on state budget support. There is speculation that soon the University will  
262 become entirely privatized, with an emphasis on biotechnology and health care programs  
263 since the city continues to attract these sorts of companies.

264

265 *2018 – “Don't Drink Milk” Bioterrorism Threat Currently Under Investigation*

266 Bioterrorism group reveals they contaminated milk supplies produced in Wisconsin's  
267 farms and factories. This sets off a state-wide alarm with severe impacts on the state's  
268 economy and Madison in particular.

269

270 *2020 – Only Twenty Muggings in Arboretum Last Year*

271 With an unprecedented rate of unemployment and a steady trend of increased  
272 urbanization of city regions across the county, crime in Madison is evident by increased  
273 muggings in the Arboretum. The Arboretum is no longer considered a safe place to jog,  
274 bike, or walk. People shift their attentions to other green spaces further outside of the  
275 city and cease to care as much about the Arboretum as a place to recreate.. there is no  
276 extra funding available at the University to combat the increased crime and the city itself  
277 is stretched to the limit.

278

279 *2024 – Environmental Philanthropy at All-Time Low*

280 The dragging economy, national security concerns in the face of continued terrorist  
281 threats, and country's preoccupation with the Middle East leads to an all-time low in  
282 environmental philanthropy in 2024. People's attitudes have shifted from relatively  
283 "green" values to a prioritization of protecting their families and bank accounts in a time  
284 of uncertainty.

285

286 *2030 – City of Madison Population Surpasses Half a Million*

287 Despite problems of crime and unemployment, Madison is consistent with a nation-wide  
288 trend of increasing urbanization. Population growth and concern over global warming  
289 drives this population growth in the City of Madison, with people from coastal areas  
290 moving inland. Development of the city has expanded outward, taking over additional  
291 agricultural lands, but also it has expanded upward, with increased density and height of  
292 buildings in the downtown area and along Monroe Street. Generally as the population  
293 rises and as the economy struggles, the citizens stop caring about the environment and  
294 their attentions shift elsewhere as the demand for limited resources intensifies. Daily life  
295 is full of more traffic and less wildlife, which also puts a strain on stormwater  
296 infrastructure and clean water availability.

297

298 *2031 – City Purchases UW-Arboretum for \$18 Million*

299 Continued demand for more residential and commercial development combined with  
300 diminished University funding and public support for the Arboretum finally leads to the  
301 sale of the property to the City for development. Generally the fear over national  
302 security and the pressures of an increasing population makes people less interested in  
303 Lake Wingra and the surrounding area. The lack of resources to combat invasives,  
304 combined with the diminished support of the University and increased crime leads to a  
305 climate in which no citizen group resists opening it up to development. People care  
306 more about having money for the local economy and schools than for preserving the  
307 environment and natural places.

308

309 *2033 – Kudzu Found Along Beltline*

310 Continued environmental problems with a lack of funding or initiative to address them...

311

312 *2035 -- US Declares War on China*

313 Economic woes at home force the US to take drastic measures against its main  
314 competitor, China...Not a good climate for focusing on Lake Wingra's problems...

315

316

317 **Group 5: Dystopia** (Amy Kamarainen, David Gilroy\*, Rebecca Power, Daniel Einstein)

318

319 What if Lake Wingra disappears?

- 320 • No recharge
- 321 • Development engulfs it
- 322 • Biologically dead, water, but bad water

323

324 ***Headlines***

325 2035: Wingra Mall opens

326 2030: City disposes of Disease, Surplus Lake – drained for development

327 2025: Madison Lakes Ice-free year round

328 2015: UW sells Arboretum for Global Stem Cell Research Park

329 2010: Madison Water table continues to decrease, Lake becomes ecologically dead

330 2008: Property becomes less valuable and gets developed

331

332 What would have to happen to cause loss of value?

333

334 ***Ecological***

- 335 ♦ Eutrophication
- 336 ♦ Water level decrease, climate warming and disease

337

338 ***Socio-Economic***

- 339 ♦ Limited Fuel supply, Auto-transport system collapses, move to urban centers
- 340 ♦ Madison is nice, good economy so → Increased immigration to Madison which
- 341 results in: resource stress and open space more attractive to development value
- 342 change with new demographic

343

344 ***Politically***

- 345 ♦ If no longer navigable waters, Fed Regs lax, state doesn't step in to protect wetland
- 346 National Security changes leading to urban growth, lack of funds for nat

347

348

349

350

351

352 Notes from breakout groups  
353

354 **Wingra Scenarios Workshop**

355 Memorial Union, University of Wisconsin-Madison  
356

357 2 March 2007  
358

359 **Wildcard Groups**

360 (\* Indicates scribe for group)  
361

362 **Group 1: Storminess**

363 (Brian Weidel, Justin Fox, Matt Kornis\*, David Gilroy, John Nicol)  
364

365 *Headlines/Main points*

- 366 ♦ ETHANOL  
367 ♦ Record rain in November overruns stormwater drainage system, Lake in trouble.  
368 ♦ Drought in summer causes mud flats in wingra  
369 ♦ Wingra becomes farmers paradise due to ethanol/corn crop boom.  
370 ♦ Lake Wingra restoration begins using influx of funds from ethanol crop.  
371 ♦ Catastrophic drought reduces corn crop, UW genetically modified corn introduced  
372 that survives drier conditions. Corn crossed with loosestrife and cactus?  
373

374 *Scribe notes*

- 375 ♦ Can already feel it some what with uncertainty of lake freezing over (ice  
376 skating/fishing)  
377 ♦ What will flooding do to local area? Massive storms in lowland area of wingra. Lots  
378 of stuff washed down into wingra (potentially). Will make the communities or  
379 groups more reactionary as things change quickly. Can foster reactionary response  
380 (constant adaptation) or paralysis (don't know what to do b/c don't know what will  
381 happen in the next year).  
382 ♦ Initial paralysis, eventual resiliency and adaptation.  
383 ♦ Has started, more people aware of things going on. But it might only take one thing  
384 to swing it back to paralysis (e.g. a new superfuel like hydrogen/ethanol, etc.).  
385 ♦ So right now people are a bit unsettled and taking more notice, but one golden ring  
386 comes along and people have false sense of security. Storms may make something  
387 like this fall on its face.  
388 ♦ People recreating less, lack of care, lack on knowledge of what to do. Policy makers

- 389 here all sorts of points of view, forced to pick something and run with it to make  
 390 agendas (e.g. 9/11 a motivator in the current administration for agendas and reaction).
- 391 ♦ Lack of ice not a huge catastrophic event, may not mobilize a group. Wiping out a  
 392 crop of ethanol or something along those lines a bigger event. Global temperature  
 393 increase happening. Locally effects Wingra, but on national scale has a “jump and  
 394 put out the fire” effect. Solve the problems as they arise. DNR and EPA do this sort  
 395 of thing.
- 396 ♦ Could be cold in July. Global warming creates instability. Cities may shutdown.  
 397 Economically: can’t count on ice and can’t count on nice warm summers would hurt  
 398 the city. Uncertainty breeds a lack of attraction to Madison.
- 399
- 400 ♦ What weather components related to what makes Madison what it is?
- 401 1. FARMING: storminess can potentially reduce agriculture (corn, ethanol, other  
 402 crops).
- 403 2. ICE FISHING: People spend their money further north b/c lakes no longer  
 404 support it
- 405 3. WINTER TOURISM: skiing, skating, tubing, etc. moved northward. Winter  
 406 recreation closes down
- 407 4. Summer business also may shut down with lack of consistent weather. Instability  
 408 in weather influences where people live and where people recreate.
- 409
- 410 ♦ Instability in the weather is accounted for now. Psychological impact: anxiety,  
 411 playing with peoples minds. Tornado warnings? Vacation or weekend plans.  
 412 Lightning storms. Tornado warning alarms breed fear. Potential for more tornados  
 413 and disasters with storminess factor.
- 414 ♦ Drives up insurance costs b/c cost of living increases as a result of tornado and flood  
 415 threats (recent tornado kills 14 kids in Georgia). People start to seek stability: moves  
 416 to pacific northwest, USA southwest gone, Wisconsin a mega-center too. People will  
 417 center on stability. National scale population dynamic shifts (in the long term. 30year  
 418 projection. Madison populations swell). Natural resources in population centers  
 419 pounded to hell. Pay-for-fishing.
- 420 ♦ Easier to think of dystopia.
- 421 ♦ Construction will do well as an industry to build new dwellings and rebuilt destroyed  
 422 buildings.
- 423 ♦ Incorporate wingra goals w/n these events
- 424 ♦ Putting out fires doesn’t seem to work, uneasiness washes over people. Ethanol

- 425 solution to oil crises rises, but storminess reduces this “ultimate stability/golden ring”.  
 426 Thing you are in the calm, but storminess can blindsides the area. Causes notice of  
 427 stability and people starting to move. Areas become less useful b/c you can’t depend  
 428 on them
- 429 ◆ Wingra: lack of ice. Cant plan on ice cover for skating and fishing. Swimming  
 430 reduced by increased runoff from storminess. Lake becomes devalued b/c can’t count  
 431 on it in their life. Flooding on houses around the lake impacts community.  
 432 Technologically adapt to deal with these things, but could break down.
  - 433 ◆ Goals from FOLW start to disappear. Stargazing still ok.
  - 434 ◆ Currently try to get products locally b/c of cost of oil. Storminess/draught decreases  
 435 local products and increases dependency on imports from other areas, cost of living  
 436 arises.
  - 437 ◆ Can spin sotrminess into utopia/dystopia potential. Could increase crop output or  
 438 lead to new crops being planted in area. Knowledge of storminess leads to adequate  
 439 preparation and can actually utilize new environment/climate.
  - 440 ◆ Ecological integrity: how does this hold up with storminess. Groundwater/springs  
 441 could dry up for periods of time. Clarity of water can affect swimming.  
 442 Regeneration of spring, contaminants in well affected by storminess. Overall, more  
 443 towards a dystopia. Storms could flush system and make it less stable for human  
 444 development; create wild areas (swamp). Harder to plan for, however, so why should  
 445 we do anything.
  - 446 ◆ Can we adapt to variability? Adaptive management? Build a resilient community?  
 447 Business owner who depends on icefish have resources to diversify and do something  
 448 else. This likely to happen (greater adaptive capacity) with a time lag (paralysis  
 449 initially).
  - 450 ◆ Money from ethanol could translate into environment. More money in state can  
 451 funnel into environment or ecotourism. Farmers don’t go on vacation. But they can  
 452 now b/c ethanol takes care of itself.
  - 453 ◆ <Weidel punches Fox>
  - 454 ◆ Potential droughts kill corn, economic downturn due to reliance on corn for ethanol.
  - 455 ◆ Catastrophe motivates and mobilizes people. Stagnancy returns until next  
 456 catastrophe. Cycle of paralysis and reaction.
  - 457 ◆ Rain = catastrophic runoff, screws up the lake in some way. Massive pulse of  
 458 contaminants and fertilizer. Epic rains. Eutrophication of Wingra overnight. Wettest  
 459 month on record, water clarity to one foot. Farmers paradise closed.
- 460

461 **Group 2: Population Boom**

462 (Oonsie Biggs, Amy Kamarainen\*, Chris Uejio, Brenda Baker)

463

464 2009 – Madison outlines plan to become greenest city in the nation.

465 (Due to push by local progressive leaders, new goals are set for the city)

466

467 2010 – 5 million move to Midwest as East Coast floods

468 (Due to sea-level rise caused by global warming, people move from coasts.

469 Those who value environmental aesthetics move to Madison)

470

471 2012 – Madison population DOUBLES – Housing market booms

472 (Due to influx of people, cost of living sky-rockets. Only wealthy people can  
473 afford to live in downtown Madison)

474

475 2015 – Monroe St. converted to high-rises

476 Walmart Center for Sustainability buys out Edgewood College

477 Star-gazing convention relocates to Quetico

478 (Due to continued population growth, and Madison’s goal to grow up and not out,

479 Monroe street is replaced with high-rises. Mom and pop stores can’t pay rent and

480 can’t compete with “big box” stores so Walmart takes over the market. Since

481 Madison has become heavily urbanized, there is much light pollution and it is

482 hard to see stars within the city limits)

483

484 2018 – Wingra swimming and canoeing accidents exceed 1,000

485 (Since population is so large and summers are getting warmer there are higher  
486 demands for lake recreation. Lake Wingra becomes crowded and dangerous.)

487

488 2020 – Lake Wingra water use permits sell out in 1 hour

489 Native plant on Lake Wingra shores – TRAMPLED

490 (In response to crowding issue on the lake, the city implements a permit system

491 for anyone who wants to use the lake. This forces many people to recreate on the

492 shorelines, which are not protected. Therefore, much of the native vegetation

493 near the lake is trampled and lost. Also, the permitting system limits the users of

494 the lake to those who can afford it (Lake Wingra becomes elitist))

495

496 2022 – Scientists report no groundwater input to Lake Wingra

497 Annual fish stocking triples  
498 (Due to continued depletion of groundwater resources and drawing down of the  
499 gw table, inputs to Lake Wingra become limited to surface runoff. Despite  
500 permitting system recreational demands on the lake remain high and fish stocking  
501 increases to meet demand)  
502

503 2025 – Permeable pavement mandatory in Madison  
504 Hydrogen power only on Madison roads  
505 (In response to groundwater depletion, Madison implements mandatory  
506 permeable roadways. Also, to maintain their green image, hydrogen powered cars  
507 only are allowed to drive within city limits.)  
508

509 2030 – Madison population tops 1 million due to influx of refugees from war-torn Middle  
510 East  
511 (Population once again surges due to world events. People are drawn to the city  
512 because Madisonians are known for their involvement in social justice issues.  
513 Whereas the previous population surge brought affluent, environmentally minded  
514 people to the city, the refugees are more concerned with survival than with  
515 environmental protection. Refugee influx places a burden on social infrastructure  
516 in the city.)  
517

518 2035 – Green technology keeps Madison’s environmental footprint at 1990 levels despite  
519 dramatic population growth.  
520 (However, reliance on green technology keeps Madison afloat.)  
521  
522

523 **Group 3: Super Invader**

524 (Anne Forbes, Jennifer Schmitz, David Zaks, Paul West\*, Rebecca Power)

525

526 *Headlines* (David Zaks' notes)

- 527 ♦ Granddaughter of Robert Redford killed by neurotoxin in Wingra
- 528 ♦ Wall built around lake to prevent further injury
- 529 ♦ Redford family establishes \$50 million endowment for Wingra, \$5 billion pledged for
- 530 regeneration of rest of Madison lakes
- 531 ♦ County-wide civil government created to tackle problem
- 532 ♦ Genetic diversity of Wingra biodiversity stores in Vilas Zoo, partnership begun
- 533 between FOLW & Vilas Zoo
- 534 ♦ Lake Wingra water level drawn down to kill off invasive carp (and other bad things
- 535 too)
- 536 ♦ All quiet on the Wingra front: Freeze kills off everything
- 537 ♦ Reintroduction effort successful
- 538 ♦ 200,000+ person celebration on shores of lake wingra brings down wall, brick by
- 539 brick
- 540 ♦ Success of Wingra project starts of projects in other Madison Lakes

541

542 *Notes from Paul West*

- 543 ♦ Granddaughter of Robert Redford killed by neurotoxin in Wingra -prior to this
- 544 happening, people were developing fear of the lakes -lakes viewed as unsafe places -
- 545 anglers tried some techno fixes (protective space-age suits) -removal tried but too
- 546 dangerous -integrity of the lake and fisheries begins to collapse/change
- 547 ♦ Wall built around lake to prevent further injury
- 548 ♦ No immediate solution seen so isolated lakes from the public -quality of the lakes
- 549 continue to degrade.
- 550 ♦ Redford family establishes \$50 million endowment for Wingra, \$5 billion pledged for
- 551 regeneration of rest of Madison lakes -gift follows trend of many recent large
- 552 philanthropic gifts--donations act as "contracts" in that future funds dependent on
- 553 meeting certain outcomes
- 554 ♦ County-wide civil government created to tackle problem -this group formed to deliver
- 555 on the expected outcomes (eliminate Super Carp from Wingra) -Lake Wingra
- 556 continues to degrade
- 557 ♦ Genetic diversity of Wingra biodiversity stores in Vilas Zoo, partnership begun
- 558 between FOLW & Vilas Zoo -through funding, shift in direction of Vilas Zoo so that

- 559 can house individual or small populations of species to be reintroduced. -as a side  
560 benefit, also generates additional awareness about sp. in the lake
- 561 ♦ Lake Wingra water level drawn down to kill off invasive carp (and other bad things  
562 too) -as part of an adaptive management strategy, lake level is drawndown over the  
563 winter. -impacts on not only the fish, but also overwintering animals in the lake bed,  
564 like turtles.
- 565 ♦ All quiet on the Wingra front: Freeze kills off everything -impacts on not only the  
566 fish, but also overwintering animals in the lake bed, like turtles. -[note: did not  
567 discuss social awareness or community involvement here or the previous headline]
- 568 ♦ Reintroduction effort successful -species reestablished from small founding  
569 populations and new individuals arrive from elsewhere.
- 570 ♦ 200,000+ person celebration on shores of lake wingra brings down wall, brick by  
571 brick - community "frees" the lake through a celebration that (at least looks like)  
572 tearing down of the Berlin Wall.
- 573 ♦ Success of Wingra project starts of projects in other Madison Lakes -second round of  
574 funding is received. -approach, lessons learned from Wingra are well-documented  
575 and then adapted to other Madison lakes.
- 576 ♦ Other issues not addressed in the headlines, but were discussed: -Would the common  
577 carp or other carp sp. compete with the super invader (and so people would manage  
578 for the "good" carp) -can they ever be eradicated (even if rotenone?) -what does  
579 "saving" lake wingra accomplish if the surrounding lakes are all invaded? -do we  
580 need to define how "bad" lake can get so we can assess if it can be recovered?
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- 582

583 **Group 4: Tribalization**

584 (Matt Diebel\*, Nick Preston, Matt van de Bogert, John Pohlman, Daniel Einstein)

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- 586 ♦ Militant musky stalkers
- 587 ♦ You can't touch this water
- 588 ♦ The likely course for political fragmentation is political paralysis
- 589 ♦ Extreme polarization
- 590 ♦ Nature should be left to take its course
- 591 ♦ Constituency aligned with Native American populations
- 592 ♦ Technological solutions – drain Lake Wingra and start over
- 593 ♦ Local conflict as a microcosm of National divisions
- 594 ♦ What happens if people don't coalesce into a unified group
- 595 ♦ Higher order social divisions are fairly distant from the Wingra goals.
- 596 ♦ Security concerns at odds with natural environment
- 597 ♦ Distraction from lake issues might be neutral
- 598 ♦ Issue oriented fundraising from private donors
- 599 ♦ Promote Lake Wingra as the Central Park of Madison
- 600 ♦ Paint Wingra's appeal to the interests of different tribes
- 601 ♦ New land claim on Lake Wingra: this is ours
- 602 ♦ Out-of-town musky fishers vs. South Madison bullhead fishers vs. Hmong bluegill  
603 and carp fishers
- 604 ♦ Crime increases at Vilas Park Drive
- 605 ♦ Cyanide detected in Wingra Creek – musky poaching investigated
- 606 ♦ Fishing boat hits canoe on Lake Wingra: two killed
- 607 ♦ DNR and UW scientists blamed for musky decline in Lake Wingra
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