

Full Teaching Professor
Colorado School of Mines
Civil and Environmental Engineering Department
1500 Illinois Street
Golden, CO 80401

Office 303-273-3613
Mobile 970-691-2241

EDUCATION

Ph.D. in Civil and Environmental Engineering May 2010
Colorado State University, Fort Collins, CO
Dissertation: Decision Support Systems for Efficient Irrigated Agriculture

M.S. in Fisheries, Wildlife, and Conservation Biology Dec 2008
Colorado State University, Fort Collins, CO
Thesis: Using Bendway Weirs to Aid in the Recovery of the Endangered Rio Grande Silvery Minnow *Hybognathus amarus*

M.S. in Civil Engineering May 2005
Colorado State University, Fort Collins, CO
Thesis: Effects of Bendway Weir Characteristics on Resulting Eddy and Channel Flow Conditions

B.S. in Civil Engineering Dec 2003
Colorado State University, Fort Collins, CO
Universitaet Dortmund, Dortmund, Nordrhein-Westphalen Germany

PROFESSIONAL LICENSURE

Professional Engineer P.E. Colorado License Number - 453776

REFEREED JOURNAL PUBLICATIONS (20)

1. Franco, K. Coulibaly, T. Kunberger, **K-D. Kinzli**, S. Arbelaez, and T. Missimer. (2017). Evolution of Heterogeneous Mixed Siliciclastic/Carbonate Aquifers Containing Metastable Sediments. *Groundwater*, (In Press)
2. **K-D Kinzli**, T Kunberger, R O'Neill & A Badir (2017). A low-cost approach for rapidly creating demonstration models for hands-on learning, *European Journal of Engineering Education*, DOI: 10.1080/03043797.2017.1311306
3. **K-D. Kinzli**, D. Gensler, and M. Martinez (2015). Low-Cost Pneumtaic Sensor for Water Level Detection in Gauging Stations. *River Research and Applications*, DOI: 10.1002/rra.2996
4. R Drendel, **K-D. Kinzli**, A. Koebel and T. Missimer (2015). Management of BWRO systems using long-term monitoring of feed water quality to avoid future membrane process failure, *Desalination and Water Treatment*, DOI: 10.1080/19443994.2015.1077351

5. **K-D. Kinzli**, D. Gensler, R. Oad and N. Shafike (2015). Implementation of a Decision Support System for Improving Irrigation Water Delivery. *Journal of Irrigation and Drainage Engineering*. 10.1061/(ASCE)IR.1943-4774.0000916, 05015004
6. 5) DeJonge, K., Ahmadi, M., Ascough, J. and **K-D. Kinzli** (2015). Sensitivity Analysis of Reference Evapotranspiration to Sensor Accuracy. *Computers and Electronics in Agriculture*. 110: 176-186.
7. **Kinzli, K-D.**, Gensler, D., DeJonge, K., Oad, R., and N. Shafike (2014). Validation of a Decision Support System. *Journal of Irrigation and Drainage Engineering*. DOI: 10.1061/(ASCE)IR.1943-4774.0000829 [ASCE EWRI Honorable Mention Paper Award 2016](#)
8. Myrick, C. A., Z. E. Underwood, and **K.-D. Kinzli**. (2013). Supporting undergraduate education with realistic laboratory exercises and research experience. *Fisheries*. 38(4): 160-168.
9. Prior, A., Oad, R., and **K-D. Kinzli** (2013). Agricultural Water Conservation in the High Plains Aquifer and Arikaree River Basin. *Journal of Water Resource and Protection*. 5(7):747-759.
10. Spelman, D., **Kinzli, K-D.**, and T. Kunberger (2013). Calibration of the 10HS Soil Moisture Sensor for Southwest Florida Agricultural Soils. *Journal of Irrigation and Drainage Engineering*. 139(12), 965–971.
11. Lepak, J.M., **Kinzli, K.D.**, Fetherman, E.R., Pate, W.M., Hansen, A.G., Gardunio, E.I., Cathcart, C.N., Stacy, W.L., and Underwood, Z.E. (2012) Manipulation of growth to reduce sport fish mercury concentrations on a whole-system scale. *Canadian Journal of Fisheries and Aquatic Sciences*, 69(1): 122-135.
12. Gensler, D. and **Kinzli, K-D.** (2012) Examining the Feasibility of Hydropower Generation in Irrigation Canals: A Case Study of the Middle Rio Grande Conservancy District. *Journal of Irrigation and Drainage Engineering*. 139(5): 405-413.
13. **Kinzli, K.**, Shafike, N., Manana, N., Spelman, D. and Roark, M. (2012). Determining the Interaction between the Rio Grande and Riverside Drains using an ADCP. *River Research and Applications*. 30(2):259-267.
14. **Kinzli, K-D.**, Shafike, N., Bauer, P., Lundahl, A., Schmidt-Peterson, R., Harris, S., Lewis, G., Johnson, P., and Timmons, M. (2011). Quantifying River Accretion in the Upper Rio Grande Gorge, New Mexico, Using an Acoustic Doppler Current Profiler. *River Research and Applications*. 29(1): 4-16.
15. **Kinzli, K-D.**, Manana, N., and R. Oad. (2011). A Comparison of Field and Laboratory Calibration of a Soil Moisture Capacitance Probe for Various Soils. *Journal of Irrigation and Drainage Engineering*. 138(4): 310-321. [ASCE EWRI Honorable Mention Paper Award 2014](#)
16. **Kinzli, K-D.**, Martinez, M., Oad, R., Prior, A., and D. Gensler. (2010). Using an ADCP to Determine Canal Seepage Loss in an Irrigation District. *Agricultural Water Management*. 97(6): 801-810.

17. Gensler, D. Oad, R. and **Kinzli, K-D.** (2009). Irrigation System Modernization: A Case Study of the Middle Rio Grande Valley. *Journal of Irrigation and Drainage Engineering*. 135(2): 169-176.
18. Oad, R. Garcia, L. **Kinzli, K-D.**, Patterson, D and N. Shafike. (2009). Decision Support Systems for Efficient Irrigation in the Middle Rio Grande Valley. *Journal of Irrigation and Drainage Engineering*. 135(2): 177-185.
19. **Kinzli, K-D.** and C. Thornton. (2009). Predicting Velocity in Bendway Weir Eddy Fields. *River Research and Applications*. 26(7): 823-834.
20. **Kinzli, K-D.** and C. Myrick. (2009). Bendway weirs: could they be used to create habitat for the endangered Rio Grande silvery minnow. *River Research and Applications*. 26(7): 806-822.

BOOK CHAPTERS (3)

- 1) Oad, R. Garcia, L. **Kinzli, K-D.** Patterson, D. (2006). Decision Support Systems for Efficient Irrigated Agriculture. In: *Sustainable Irrigation Management, Technologies and Policies*. Wessex Institute of Technology, Southampton UK. Edited by: Carlos Brebbia. ISBN 1743-3541
- 2) **Kinzli, K-D.** Gensler, D. Oad, R. (2011) Linking a Developed Decision Support System with Advanced Methodologies for Optimized Agricultural Water Delivery. In: *Efficient Decision Support Systems – Practice and Challenges in Multidisciplinary Domains*. Edited by: Chiang Jao. ISBN 978-953-307-441-2
- 3) **Kinzli, K-D.** (2012) A Low Cost Remote Monitoring Method for Determining Farmer Irrigation Practices and Water Use. In: *Problems, Perspectives and Challenges of Agricultural Water Management*. Edited by: Manish Kumar. ISBN 978-953-51-0117-8

OTHER PUBLICATIONS (4)

- Oad, R. Garcia, L. **Kinzli, K-D.** (2011) Decision Support Systems for Efficient Irrigation Water Management in the Middle Rio Grande. *Colorado Water* 28(1): 8-10
- Kinzli, K-D.** (2010) Improving Irrigation System Performance through Scheduled Water Delivery in the Middle Rio Grande Conservancy District. Dissertation. Colorado State University. 435 pages. ISBN 9781124010014
- Oad, R. and **Kinzli, K-D.** (2006). SCADA Employed in Middle Rio Grande Valley to Help Deliver Water Efficiently. *Colorado Water* 23(2): 10-13
- Kinzli, K-D.** (2005) Effects of Bendway Weir Characteristics on Resulting Eddy and Channel Flow Conditions. Thesis. Colorado State University. 376 pages. OCLC 61728081

PEER REVIEWED CONFERENCE PAPERS (19)

DeJonge, K., Ahmadi, M., Ascough, J., and **K.D. Kinzli** (2015) Sensitivity Analysis of Reference ET to Sensor Accuracy. American Society of Agronomy Annual Meeting 2015: Synergy in Science – Partnering for Solutions. Minneapolis, MN. November

Kinzli, K-D., Kunberger, T., and R. O’Neill. (2015) A Low Cost Approach to Rapidly Creating Demonstration Models for Hand-on Learning. ASEE Southeast Regional Conference. University of Florida. Gainesville, FL. April

Kinzli, K-D., Gensler, D., Oad, R., and N. Shafike. (2014) Implementation of a Decision Support System for Improving Irrigation Water Delivery. USCID National Water Management Conference. Groundwater Issues and Water Management – Strategies Addressing the Challenges of Sustainability. Sacramento, CA. March

Kinzli, K-D., Gensler, D., Oad, R., and N. Shafike. (2013) Validation of a Decision Support System for Improving Irrigation System Performance. USCID International Water Management Conference. Using 21st Century Technology to Better Manage Irrigation Water Supplies. Phoenix, AZ. April

Shah, S. K., Gomez, R., and **K-D. Kinzli** (2013) Hurricane Katrina: Its Impacts to the Middle Rio Grande Region of New Mexico. USCID International Water Management Conference. Using 21st Century Technology to Better Manage Irrigation Water Supplies. Phoenix, AZ. April

Kinzli, K-D., Gensler, D., Martinez, M., Morris, A. and Z. Wohlpart (2013) The Use of Low-Cost Pneumatic Sensors for Water Level Detection in Permanent Stream Gage Stations. USCID International Water Management Conference. Using 21st Century Technology to Better Manage Irrigation Water Supplies. Phoenix, AZ. April

DeJonge, K., Ahmadi, M., Ascough, J., and **K-D. Kinzli** (2013) Sensitivity Analysis of Sensor Accuracy for the ASCE Standardized Evapotranspiration Equation. USCID International Water Management Conference. Using 21st Century Technology to Better Manage Irrigation Water Supplies. Phoenix, AZ. April

Kinzli K-D., Manana, N., and R. Oad (2012) A Comparison of Laboratory and Field Calibration of the ECH20 EC-20 Soil Moisture Probe for Soils in the Middle Rio Grande Valley. USCID Water Management Conference. Irrigated Agriculture Responds to Water Use Challenges- Strategies for Success. Austin, TX. April

Garcia, L., Manana, N., Oad, R., **Kinzli, K-D.**, and D. Gensler (2012) Development of SCADA and Decision Support Systems for the Middle Rio Grande Conservancy District. USCID Water Management Conference. Irrigated Agriculture Responds to Water Use Challenges- Strategies for Success. Austin, TX. April

Myrick, C., Underwood, Z. and **K-D. Kinzli**. (2012) Supporting Fisheries Undergraduate Education with Realistic Laboratory Exercises and Research Experience. University Education in Natural Resources – 9th Biennial Conference. Fort Collins, CO. March
Friday, March 23rd

Shah, S., Gensler, D., **Kinzli K-D.**, Oad, R., and N. Shafike (2011). Improving Irrigation System Performance through Scheduled Water Delivery. USCID Conference on Irrigation and

Drainage: Emerging Challenges and Opportunities for Irrigation Managers; Energy, Efficiency, and Infrastructure. Albuquerque, NM. April

Oad, R., **Kinzli K-D.**, Shah, S., and D. Gensler (2011). Examining the Feasibility of Hydropower Generation in the Middle Rio Grande Conservancy District. USCID Conference on Irrigation and Drainage: Emerging Challenges and Opportunities for Irrigation Managers; Energy, Efficiency, and Infrastructure. Albuquerque, NM. April

Kinzli K-D., Martinez, M., Oad, R., Prior, A., and D. Gensler (2011). Using an ADCP to Determine Canal Seepage Losses in the Middle Rio Grande Conservancy District. USCID Conference on Irrigation and Drainage: Emerging Challenges and Opportunities for Irrigation Managers; Energy, Efficiency, and Infrastructure. Albuquerque, NM. April

Manana, N., **Kinzli, K-D.**, Oad, R., Garcia, L., Patterson, D., and N. Shafike (2010). USCID International Conference on Irrigation and Drainage: Meeting Irrigation Demands in a Water Challenged Environment. Improving Irrigation System Performance in the Middle Rio Grande through Scheduled Water Delivery. Fort Collins, CO. September.

Shah, S., Gensler, D., **Kinzli, K-D.**, and R. Oad (2009). ICID International Conference. Improving Irrigation System Performance in the Middle Rio Grande through Scheduled Water Delivery. New Delhi, India. December.

Kinzli, K-D., Oad, R., Garcia, L., Shafike, N., and D. Gensler (2009). USCID International Conference on Irrigation and Drainage: Climate Change. Improving Irrigation System Performance in the Middle Rio Grande through Scheduled Water Delivery. Salt Lake City, UT. November.

Oad, R., **Kinzli, K-D.**, Shafike, N., and D. Gensler (2007). USCID Fourth Annual Conference on Irrigation and Drainage. Decision-Support Systems for Efficient Irrigation in the Middle Rio Grande. Sacramento, CA October.

Gensler, D., Oad, R., and **K-D. Kinzli** (2007). USCID Fourth Annual Conference on Irrigation and Drainage. Irrigation System Modernization in the Middle Rio Grande Valley. Sacramento, CA October.

Kinzli, K-D., Oad, R., Garcia, L., and D. Patterson (2006). International Conference on Sustainable Irrigation. Decision Support Systems for Efficient Irrigated Agriculture. Bologna, Italy. September.

OTHER CONFERENCE PAPERS AND PRESENTATIONS (27)

L. Nguyen, A. Badir, **K-D. Kinzli**, and R. O'Neill (2016). Student Learning and Practitioner Participation in FGCU Civil Engineering Senior Design. FES Educator-Student-Practitioner Summit. Jacksonville, FL. August

K-D. Kinzli (2015). A Low Cost Approach for Rapidly Creating Demonstration Models for Hands-on Learning. National Academy of Engineering Frontiers of Engineering Education Symposium. Irvine, CA. October.

Missimer, T., and **K-D. Kinzli** (2015). Large-Scale Artificial Groundwater Recharge over Long-Time Periods in Response to Climate Change in Arid Regions and Florida. American Ground Water Trust 15th Annual Aquifer Recharge Program. Orlando, FL. September

Franco, D., Arbelaez, S., **Kinzli, K-D.**, Kunberger, T., and T. Missimer. (2015). Evolution of Mixed Siliciclastic/Carbonate Aquifer Containing Metastable Components. Research Day. Florida Gulf Coast University. Fort Myers, FL. April

Botha, B., Harvey, S., **Kinzli, K-D.**, Kunberger, T., and T. Missimer. (2015) Transition in Hydraulic Conductivity from an Unlithified Late Miocene Age Channel-Fill Deposit to a Marine Reworked Sand Facies, Hendry County, Florida. Research Day. Florida Gulf Coast University. Fort Myers, FL. April

Franco, D., Arbelaez, S., Botha, B., Harvey, C., **Kinzli, K-D.**, Kunberger, T., and T. Missimer. (2015). Evolution of Mixed Siliciclastic/Carbonate Aquifer Containing Metastable Components. ASEE Southeast Regional Conference. University of Florida. Gainesville, FL. April

Botha, B., Harvey, C., Franco, D., Arbelaez, S. **Kinzli, K-D.**, Kunberger, T., and T. Missimer. (2015) Transition in Hydraulic Conductivity from an Unlithified Late Miocene Age Channel-Fill Deposit to a Marine Reworked Sand Facies, Hendry County, Florida. ASEE Southeast Regional Conference. University of Florida. Gainesville, FL. April

Franco, D., Arbelaez, S., Missimer, T., **Kinzli, K-D.**, and T. Kunberger (2015). Evolution of Mixed Siliciclastic/Carbonate Aquifer Containing Metastable Components. AWRA Southwest Florida Water Resources Conference. (3rd Place undergraduate Student Poster Award). Florida Gulf Coast University Fort Myers, FL. January

Franco, D., Arbelaez, S., Missimer, T., **Kinzli, K-D.**, and T. Kunberger (2014). Evolution of Mixed Siliciclastic/Carbonate Aquifer Containing Metastable Components. STEM Undergraduate Research Symposium, Whitaker Center for STEM Education, Florida Gulf Coast University, Fort Myers, FL. December

Kondratieff, M., Fox, B., **Kinzli, K-D.** and N. Holden (2014). Whitewater Park Hydraulics: Implications for Fish. International Conference on Engineering and Ecohydrology for Fish Passage. University of Wisconsin. Madison, WI. June

DeJonge, K.C., Ahmadi, M., Ascough II, J.C., **Kinzli, K.** (2013). Sensitivity and uncertainty of input sensor accuracy for grass-based reference evapotranspiration. American Society of Agronomy, Soil Science Society of America and Crop Science Society of America International Conference. Tampa, FL. November

Kondratieff, M., Fox, B., **Kinzli, K-D.** (2013) Are White Water Parks Good Fish Habitat? International Conference on Engineering and Ecohydrology for Fish Passage. Oregon State University. Corvallis, OR. June.

Kondratieff, M., Fox, B., **Kinzli, K-D.**, and N. Holden. (2013). Whitewater Parks and their Influence on Fish Habitat Quality. Colorado -Wyoming American Fisheries Society Conference. Cheyenne, WY. February.

Spelman, D., **Kinzli K-D** and T. Kunberger. (2013). Calibration of the 10HS Soil Moisture Sensor for Southwest Florida Agricultural Soils AWRAs Southwest Florida Water Resources Conference. (2nd Place undergraduate Student Poster Award). Fort Myers, FL. January

Bokrand, C., Komisar, S., Kunberger, T., and **Kinzli K-D**. (2011). Barrier Island Geothermal Cooling: Using Shallow Groundwater Cooling in Low Cost Geothermal Heat Transfer Systems on Barrier Islands. AWRAs Southwest Florida Water Resources Conference. Naples, FL. November

Kinzli K-D. (2011). Quantifying River Accretion in the Upper Rio Grande Gorge, New Mexico, using an ADCP. National Surface Water Conference & Hydroacoustics Workshop. Tampa, FL. March.

Kinzli, K-D. (2010). Using an Acoustic Doppler Current Profiler to Determine Surface and Groundwater Interactions. AWRAs Southwest Florida Water Resources Conference. Fort Myers, FL. November.

Kinzli, K-D, Martinez, M., Oad, R., Prior, A., and D. Gensler (2010). Using an ADCP to Determine Canal Seepage Loss in an Irrigation District. New Mexico Water Resources Research Conference. Socorro, NM. August.

Lepak, J.M., Pate, W.M., Cathcart, C.N., Fetherman, E.R., **Kinzli, K-D**, Brandt, M.M., Stacy, W.L., Underwood, Z.E., Gardunio, E.I., and Hansen, A.G (2010). Manipulation of sport fish growth to reduce mercury bioaccumulation on a whole-lake scale. Poster, Colorado-Wyoming American Fisheries Society Conference. Laramie, WY. April.

Kinzli, K-D, Martinez, M., Oad, R., Prior, A., and D. Gensler (2010). Using an ADCP to Determine Canal Seepage Loss in an Irrigation District. AGU Hydrology Days. Colorado State University. Ft. Collins, CO. March.

Manana, N., **Kinzli, K-D**, Oad, R., Garcia, L., Patterson, D., and N. Shafike (2010). Improving Irrigation System Performance in the Middle Rio Grande through Scheduled Water Delivery. AGU Hydrology Days. Colorado State University. Ft. Collins, CO. March.

Lepak, J., Pate, W., Cathcart, N., Fetherman, E., **Kinzli, K-D**, Brandt, M., Stacey, W., Underwood, Z., Gardunio, E., and A. Hanson (2010). Manipulation of Sport Fish Growth to Reduce Mercury Bioaccumulation on a Whole-Lake Scale. Western Division American Fisheries Society Conference. Poster Presentation (Best Poster Award). Salt Lake City, UT. March.

Kinzli, K-D, Oad, R., Garcia, L., Shafike, N., and D. Gensler (2009). Improving Irrigation System Performance in the Middle Rio Grande by Utilizing a Decision Support System, SCADA, and a Public Outreach Program. New Mexico Water Research Symposium. New Mexico Technological University, Socorro, NM. August.

Lepak, J., Pate, W., Cathcart, N., Fetherman, E., **Kinzli, K-D**, Brandt, M., Stacey, W., and Z. Underwood (2009). Manipulation of Sport Fish Growth to Reduce Mercury Bio-accumulation on

a Whole-Lake Scale. Western Division American Fisheries Society Conference. Poster Presentation. Albuquerque, NM. May.

Kinzli, K-D., and C.A. Myrick (2009). Bendway weirs: would they aid the recovery of the endangered Rio Grande silvery minnow. Western Division American Fisheries Society Conference. Albuquerque, NM. May.

Kinzli, K-D., Oad, R., Garcia, L., Patterson, D., and D. Gensler (2009). Improving Irrigation System Performance through Scheduled Water Delivery in the Middle Rio Grande Conservancy District. AGU Hydrology Days. Colorado State University. Ft. Collins, CO. March.

Kinzli, K-D., and C.A. Myrick (2009). Bendway weirs; would they aid the recovery of the endangered Rio Grande silvery minnow, *Hybognathus amarus*. Colorado Wyoming American Fisheries Society Conference -Incorporating Climate Change into Local Management Decisions. Loveland, CO. February.

Lepak, J.M., Pate, W.M., Cathcart, C.N., Fetherman, E.R., **Kinzli, K-D.**, Brandt, M.M., Stacy, W.L. and Underwood, Z.E (2009). Manipulation of sport fish growth to reduce mercury bioaccumulation on a whole-lake scale. Poster, Colorado-Wyoming American Fisheries Society Conference. Loveland, CO. February.

Kinzli, K-D., Oad, R., Garcia, L., and D. Patterson (2008). Efficient Irrigation Water Use in the Middle Rio Grande: The Use of Decision Support Systems and Infrastructure Modernization-Poster Presentation. CSU Global Water Colloquium. Colorado State University. Ft. Collins, CO. March.

Kinzli, K-D., Oad, R., Garcia, L., and D. Patterson (2008). Efficient Irrigation Water Use in the Middle Rio Grande: The Use of Decision Support Systems and Infrastructure Modernization. Colorado State University. AGU Hydrology Days. Ft. Collins, CO. March.

Oad, R., **Kinzli, K-D.**, Shafike, N., and D. Gensler (2007). Decision-Support Systems for Efficient Irrigation in the Middle Rio Grande. AWRA 43rd National Water Resources Conference. Albuquerque, NM, November.

Oad, R., Garcia, L., Shafike, N., and **K-D. Kinzli** (2007) Decision Support Systems for Efficient Irrigated Agriculture in the Middle Rio Grande. New Mexico Water Research Symposium. New Mexico Technological University. Socorro, NM. August.

Kinzli, K-D., and R. Oad (2007). Improving Water Delivery Efficiency in the Middle Rio Grande using a Decision Support System. AGU Hydrology Days. Colorado State University. Ft. Collins, CO. April.

Kinzli, K-D., Oad, R., Garcia, L., and D. Patterson (2006). Improving Irrigation Water Use in the Middle Rio Grande Conservancy District using a Decision Support System-Poster Presentation. AGU Hydrology Days. Colorado State University. Ft. Collins, CO. April.

Kinzli, K-D., and C. I. Thornton (2005). Effects of Bendway Weir Characteristics on Resulting Eddy and Channel Flow Conditions. AGU Hydrology Days. Ft. Collins, CO. Colorado State University. April.

PROFESSIONAL REPORTS (6)

Kinzli, K-D., and Martinez, M. Analysis of Whitewater Kayak Parks using an ADCP to Quantify Velocity Distributions and Fish Habitat. Colorado Parks and Wildlife, August 2012.

Oad, R. **Kinzli, K-D.**, Manana, N., Garcia, L. Patterson, D. and Shafike, N. Implementation of Efficient Irrigation Water Delivery in the Middle Rio Grande Utilizing a Decision Support System. New Mexico Interstate Stream Commission, September 2009.

Oad, R. **Kinzli, K-D.** Garcia, L. Patterson, D. and Shafike, N. Decision Support Systems for Efficient Water Management and Use in the Middle Rio Grande. New Mexico Interstate Stream Commission, August 2008.

Oad, R. Garcia, L. **Kinzli, K-D.** Patterson, D and Shafike, N. Efficient Irrigation Water Management and Use in the Middle Rio Grande. New Mexico Interstate Stream Commission, May 2007.

Oad, R. Garcia, L. Patterson, D. **Kinzli, K-D.** Hathaway, D. Llewellyn, D. and Young, R. Water Management Decision Support Systems for Irrigation in the Middle Rio Grande Conservancy District. New Mexico Interstate Stream Commission, March 2006.

Thornton, C. and **Kinzli, K-D.** Effects of Bendway Weir Characteristics on Resulting Eddy and Channel Flow Conditions. Project Report. United States Bureau of Reclamation. May 2005.

RESEARCH EXPERIENCE AND GRANTS**Florida Gulf Coast University, Environmental and Civil Engineering Department
Fort Myers, FL**Associate Professor

Aug 2010 to Dec 2016

- Updating a Decision Support System for Agricultural Water Management (\$19,000): PI-awarded Feb 2016.
- NSF-Experimental Wetland Mesocosm Compounds for the Everglades Wetland Research Park (\$270,000): CO-PI – submitted
- Updating a Decision Support System for Agricultural Water Management (\$19,200):PI
- Examining whitewater kayak park structure velocities using an ADCP (\$10,000 - Colorado Division of Wildlife): PI
- Examining the potential of geothermal cooling on barrier islands (\$2,500): CO-PI
- Calibration of the Decagon 10HS soil moisture probe for Southwest Florida agricultural soils (\$400): PI
- Determining riverside drain accretion in the Middle Rio Grande Valley using an ADCP: PI
- Validating a pneumatic pressure transducer for use in permanent stream gaging stations (\$5200 - MRGCD): PI
- Examining the feasibility of hydropower generation in an irrigation district: PI
- Manipulation of growth to reduce mercury concentrations in sport fish: CO-PI
- Supporting undergraduate education with realistic laboratory exercises and research experience: CO-PI
- Validation of a decision support system for improving irrigation water delivery: PI

- Using an ADCP to quantify trout habitat prior to stream restoration (\$9,000 – Colorado Parks and Wildlife): PI
- Total internal and external research funding since 2010 (\$65,300)

Colorado State University, Civil Engineering Department, Fort Collins, CO

Graduate Research Assistant

Dec 2003 to May 2010

- Assisted in writing proposals for research funding from 2005 to 2010 (\$572,000)
- Developed a decision support system for efficient water delivery in the Middle Rio Grande Valley using GIS, and the USBR ET Toolbox to determine real time agricultural crop demand
- Validated a decision support system to develop optimal irrigation water delivery schedules throughout an irrigation district
- Conducted field research on irrigation systems to determine water delivery practices
- Conducted field research and training of water delivery personnel to implement scheduled water delivery in the Middle Rio Grande Conservancy District
- Performed specific calibration of EC-20 dielectric soil moisture sensors to determine evapo-transpiration rates and completed soil texture and water holding capacity pressure plate analysis
- Constructed broad crested weirs and instrumented eight fields in the Middle Rio Grande Conservancy District with EC-20 soil moisture sensors and HOBO pressure transducers to determine agricultural water use
- Determined agricultural yields for a period of two years in the Middle Rio Grande Valley
- Assisted in automating control structures and flow measurement gates and linking structures to a SCADA system via radio telemetry
- Linked a decision support system to a SCADA system for the Middle Rio Grande Conservancy District to provide real-time water delivery recommendations
- Developed water delivery targets and calculated water balances for eight main canals in the Middle Rio Grande Conservancy District
- Conducted a irrigation canal seepage study in the Middle Rio Grande Conservancy District using an ADCP (Acoustic Doppler Current Profiler) and HOBO pressure transducers
- Provided technical assistance and training on the use of an ADCP flow measurement device for the USGS, New Mexico Interstate Stream Commission, and Middle Rio Grande Conservancy District
- Conducted a study of the Upper Rio Grande in northern New Mexico using an ADCP to determine river accretion for basin wide water allocation with the New Mexico Interstate Stream Commission
- Participated in a study to determine mercury levels in the Northern Pike (*Esox lucius*) of College Lake, CO and examined methods to reduce mercury levels through growth dilution
- Assisted in monitoring of the endangered Rio Grande silvery minnow (*Hybognathus amarus*) to determine the effectiveness of habitat improvement measures
- Assisted with research on Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*) growth rates

- Constructed and tested hydraulic models of bendway weir fields, dams, piers, rip rap and erosion control blocks and conducted analyses to determine flow relationships and developed design equations from modeling results

TEACHING EXPERIENCE

Colorado School of Mines, Civil and Environmental Engineering Department

Full Teaching Professor

Dec 2016 – Present

Classes Taught:

Hydrology and Water Resources CEEN 381

Spring 2017

Senior Design 1 EGGN 491

Spring 2017

Senior Design 2 EGGN 492

Spring 2017

Florida Gulf Coast University, Environmental and Civil Engineering Department

Fort Myers, FL

Assistant Professor

Aug 2010 to Apr 2015

Associate Professor

Aug 2015 to present

Classes Taught:

River Mechanics EGN 4930

Spring 2015

Water Resources Design CWR 4540C

Fall 2010 – Fall 2015 (6 times)

Project Planning and Management CCE 4031C

Fall 2010

Hydrology/Hydraulics CWR 3202C

Spring 2011-Spring 2015 (5 times)

Fluid Mechanics CWR 3201C

Fall 2011-Fall 2015 (5 times)

Senior Design CGN 4802C

Spring 2012 – Spring 2014 (3 times)

Water Resources University, Hanoi, Vietnam

Assistant Professor

Mechanics of Materials

Summer 2011

Colorado State University, Civil Engineering Department, Fort Collins, CO

Graduate Teaching Assistant

Jan 2004 to May 2010

Hydraulic Engineering CIVE 401

Jan 2006 to Dec 2007

Water Control and Measurement CIVE 516

Jan 2006 to May 2010

Soil, Water, and Plants CIVE 425

Jan 2006 to Dec 2007

Geotechnical Engineering CIVE 450

Jan 2004 to Dec 2005

PROFESSIONAL TEACHING DEVELOPMENT

ASCE ExCEEEd Assistant Teaching Mentor

2017

ASCE ExCEEEd Assistant Teaching Mentor

2016

NAE Frontiers of Engineering Education

2015

ASCE ExCEED Assistant Teaching Mentor	2014
ASCE ExCEED Assistant Teaching Mentor	2012
ASCE Excellence in Civil Engineering Education ExCEED Teaching Fellow	2011
ASCE Practitioner and Faculty Advisor Training	August 2011

INVITED LECTURES

Importance of Interdisciplinary Cooperation between Engineering and Fisheries. Introduction to Fisheries-FW 204, Colorado State University, December 7, 2009. Dr. Chris Myrick.

Fisheries Meets Engineering. Introduction to Fisheries-FW 204, Colorado State University, December 8, 2008. Dr. Chris Myrick.

Water Management Improvements in the Middle Rio Grande Conservancy District. Los Poblanos Irrigation Workshop. Albuquerque NM. July 23, 2008.

Flow Regulation for Irrigation Water Management and Infrastructure Improvements in Central New Mexico. Water Control and Management-CE 516, Colorado State University, March 28, 2008. Dr. Ramchand Oad.

The Rio Grande silvery minnow *Hybognathus amarus* and water management for endangered species. American Fisheries Society, Student Chapter, Colorado State University, February 27, 2008.

Fundamentals of Stilling Basins. Hydraulic Engineering - CE 401, Colorado State University, April 18, 2007. Dr. Timothy Gates.

Hydraulic Measuring Structures. Hydraulic Engineering - CE 401, Colorado State University, March 15, 2006 Dr. Timothy Gates.

Decision Support Systems for Efficient Irrigated Agriculture. Irrigation Design and Management – CE 512, Colorado State University, August 28, 2006. Dr. Terence Podmore.

Constant Head Permeameters. Geotechnical Engineering – CE 450, Colorado State University, February 25, 2005. Dr. H. Antonio Carraro.

Tsunamis -An Investigation Using Case Studies. Physical Hydrology – CE 322, Colorado State University, February, 2005. Dr. Jose Salas.

PROFESSIONAL AND ENGINEERING EXPERIENCE

Middle Rio Grande Conservancy District, Albuquerque, NM

Hydrology Technician

2006 to 2009

- Determined water delivery for agricultural demands
- Instrumented automated control gates

- Measured flow in the Rio Grande to insure compliance with endangered species requirements
- Measured flow in irrigation canals to validate and calibrate rating curves for automated measuring sites

Sear Brown Engineering, Fort Collins, CO

Engineering Technician

Aug 2002 to May 2003

- Assisted in designing roadway improvement and expansion projects using AutoCAD
- Developed programs for traffic design and management
- Analyzed traffic fatalities to identify critical intersections for improvement
- Surveyed project sites using total stations and presented results to project engineer
- Assisted in preparing project proposals and final design plans

DRC Construction, Sedalia, CO

Engineering Technician

May 2000 to Aug 2000

- Inspected sewer and water lines using remote robotic video equipment

USDA Forest Service, Fort Collins, CO

Engineering Aid

Aug 1999 to May 2000

- Developed inventories of campground infrastructure and identified areas for improvement projects
- Analyzed and inventoried water quality tests from campground wells

JOURNAL ARTICLE REVIEWER

ASCE Journal of Irrigation and Drainage
ICID Irrigation and Drainage Systems
Soil Science Society of America Journal
River Research and Applications
Journal of Hydroinformatics
Journal of Hydrology
Water Resources Management
North American Journal of Fisheries Management

EDITORIAL POSITIONS

Joint Editor 2013-present: Irrigation and Drainage - Managing Water for Sustainable Agriculture. The Journal of the International Commission on Irrigation and Drainage

Associate Editor 2010-2013: Irrigation and Drainage - Managing Water for Sustainable Agriculture. The Journal of the International Commission on Irrigation and Drainage

AWARDS

ASCE ExCEED Assistant Mentor	2017
ASCE ExCEED Assistant Mentor	2016
National Academy of Engineering Frontiers of Engineering Education Symposium	2015
ASCE Student Chapter Annual Report Honorable Mention	2014

ASCE ExCEED New Faculty Excellence in Teaching Award	2014
ASCE EWRI Journal of Irrigation and Drainage Honorable Mention Paper	2014
ASCE ExCEED Assistant Mentor	2014
ASCE ExCEED Assistant Mentor	2012
FGCU Faculty Development Grant	2010
FGCU Faculty Development Grant	2011
FGCU Faculty Development Grant	2012
FGCU Faculty Development Grant	2013
ASCE ExCEED Teaching Fellow	2011
ASCE PFATW	2011
Dr. Chi Ted Yang Scholarship	2009
Borland Graduate Research Award in Hydraulics	2008
Jeng Song Wang Memorial Scholarship	2008 and 2007
Peters Fellowship in Fish and Wildlife	2008
National Science Foundation Fast Track Scholarship	2007 and 2006
Tipton Kalmbach Award	2007
Margie Monfort Wilson Memorial Scholarship	2006
Alliances for Graduate Education in the Professoriate Scholarship	2006
Borland Graduate Scholarship in Hydraulics	2006 and 2005
Second Place Senior Design Project	2003
First Place Freshmen Design Project	1999
Freshmen Academic Scholarship	1999

PROFESSIONAL AFFILIATIONS

- ASCE 1999-present
- ASEE 2014-present
- Chi Epsilon 2003-present
- Engineers Without Borders 2004 - 2006
- American Fisheries Society 2005-present
- USCID – United States Council on Irrigation and Drainage 2005-present
- AWRA – American Water Resources Association 2007-present
- Gamma Beta Phi 2003-present
- Order of the Engineer 2003-present

LANGUAGES

English: Native Speaker
 German: Native Speaker
 Spanish: 4 Years of Study-Proficient
 Hungarian: Limited

CITIZENSHIP

United States of America
 Germany and the European Union

UNIVERSITY INVOLVEMENT AND SERVICE

Colorado School of Mines, Civil and Environmental Engineering Department

- CECS Senior Design Leadership Team 2016 to present
- Faculty Advisor ASCE 2016 to present
- Faculty Advisor CEEHS 2016 to present

Florida Gulf Coast University, Environmental and Civil Engineering Department

- WCE Graduate Committee 2010 to 2016
- WCE Peer Review Committee 2012 to 2016
- WCE Peer Review Committee Chair 2015 to 2016
- WCE Faculty Search Renewable Energy 2011 to 2012
- WCE Faculty Search Bioengineering 2012 to 2013
- CAS Faculty Search Physics 2011 to 2012
- CAS Faculty Search German 2011 to 2012
- WCE Retention and Recruitment Committee 2010 to 2011
- FGCU Faculty Senate Alternate 2011 to 2016
- FGCU Student Affairs Committee 2011 to 2016
- FGCU Academic Integrity Committee 2010 to 2016
- CAS Faculty Search Hydrodynamic Modeler 2010-2011
- Faculty Advisor WCE ASCE 2010 to 2016
- Faculty Advisor WCE Cardboard Boat Team 2010 to 2016
- Faculty Advisor WCE Order of the Engineer 2010 to 2016
- AWRA Southwest Florida Conference Committee 2010 to 2016
- Big Cypress Basin Restoration Coordination Team 2010 to 2016
- Water Advisor to Student Group Te Anse Haiti Well Project 2010

EXTRACURRICULAR ACTIVITIES

- Naples United Soccer Club 2010-2016
- Colorado State University Soccer 1999-2002
- DSC Dorstfeld 09 Soccer Club (Germany) 2002
- Fort Collins Soccer Club 2002-2010
- DOD Soccer Club 2003-2010
- Northern Colorado Cutthroats Semi Professional Soccer 2007-2010
- Trout Unlimited 2000-present