

MINUTES OF REGULAR MEETING – MAY 23, 2016

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on May 23, 2016 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, Swan, Matheis and Withers.

Directors Absent: LaMar.

Also Present: General Manager Cook, Executive Director of Engineering and Water Quality Burton, Executive Director of Water Policy Weghorst, Executive Director of Operations Shields, Director of Treasury and Risk Management Jacobson, Director of Public Affairs Beeman, Director of Administrative Services Mossbarger, Director of Water Resources Sanchez, Director of Human Resources Roney, Assistant Director of Recycling Operations Zepeda, Legal Counsel Arneson, Secretary Bonkowski, Principle Engineer Malloy, Principle Engineer Akiyoshi, Mr. Ian Swift, Mr. Matt Veeh, Mr. Barkev Meserlian, Ms. Kellie Welch, Mr. Rob Hunter, Mr. Sat Tamaribuchi, Mr. Jeff Thomas, Mr. Jim Reed, Mr. Bruce Newell, Ms. Peggy Falcon, Ms. Joan Leonard, Ms. Julie Moriarty, and other members of the public and staff.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: None.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

PRESENTATION

MUNICIPAL WATER DISTRICT OR ORANGE COUNTY PROCLAMATION

MWDOC Directors Jeff Thomas and Sat Tamaribuchi presented a Proclamation expressing appreciation for the dedicated public service of IRWD for leadership in 2015-16 in meeting California's conservation mandates and for demonstrating to Governor Brown and others throughout the State that Southern California is truly aware of the value of water.

WORKSHOP

SEWER FLOW PROJECTIONS AND DEMAND FACTOR CALIBRATION

Using a PowerPoint presentation, Principle Engineer Akiyoshi provided background on the District's Sewer Collection System Master Plan (SCSMP). Mr. Akiyoshi said that IRWD's Demand Forecast Tool uses factors to project sewer flows from the current year through build-out conditions. He reviewed the updated demand factors, calibration methodology, sewer flow projections, and provided an update on the SCSMP schedule and progress.

He further said that the future system hydraulic model, capacity analysis, and reliability and redundancy analysis are anticipated in late July with the 90% submittal, and that staff will also include an update on the SCSMP progress at a Board meeting in August or September. Following discussion, Director Swan asked to be provided a status report on current peak dry weather flow in the San Diego Creek Interceptor.

CONSENT CALENDAR

Director Swan asked that Item No. 6 be moved to the Action Calendar as he would like to add an additional meeting. There being no objections, Item No. 6 was moved accordingly. On MOTION by Reinhart, seconded and unanimously carried, CONSENT CALENDAR ITEMS 5 AND 7 THROUGH 13 WERE APPROVED AS FOLLOWS:

5. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the April 25, 2016 Regular Board Meeting be approved as presented.

7. APRIL TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for April 2016, and Disclosure Report of Reimbursements to Board members and staff; approve the April 2016 summary of payroll ACH payments in the total amount of \$2,337,626 and approve the April 2016 accounts payable disbursement summary of Warrants 366466 through 367198, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$22,371,573.

8. PROPOSED AMENDED AND RESTATED LICENSE AND SUBLICENSE FOR USE OF SAN JOAQUIN WILDLIFE SANCTUARY SITE, FACILITIES AND ACCESSWAYS

Recommendation: That the Board approve the Third Amended and Restated License Agreement between Irvine Ranch Water District and San Joaquin Wildlife Sanctuary subject to non-substantive modifications.

9. 2016 LEGISLATIVE UPDATE

Recommendation: That the Board adopt a "Support in Concept" position on SB 970 (Leyva) and the development of a State program which would provide grants to wastewater agencies for the development or implementation of projects that would integrate food waste processing by the agencies at its wastewater treatment facilities, result in the diversion of organics from local landfills, and dedicate cap-and-trade revenues to the wastewater sector; and a "Support" position on the Santa Ana Mountains to Sea National Monument proposal.

CONSENT CALENDAR (CONTINUED)

10. ON-CALL PLAN CHECK SERVICES

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$250,000 for on-call plan check services.

11. HERITAGE FIELDS DISTRICT 8 BIORETENTION BASIN

Recommendation: That the Board approve acceptance of the District 8 Bioretention NTS Facility subject to the terms and conditions set forth in the application for service, addendum thereto, and Grant of Easement subject to non-substantive changes as the General Manager may approve.

12. PETERS CANYON WASH CHANNEL WATER CAPTURE AND REUSE PIPELINE CONTRACT CHANGE ORDER

Recommendation: That the Board authorize the General Manager to approve Contract Change Order No. 6 in the amount of \$128,296.20 with E.J. Meyer Company for the Peters Canyon Wash Channel Water Capture and Reuse Pipeline, project 4985.

13. MICHELSON WATER RECYCLING PLANT FILTER PUMP STATION 2 AND DYER ROAD WELLFIELD WELLS 12 AND 13 ROOF MODIFICATIONS CONSTRUCTION AWARD

Recommendation: That the Board authorize a budget increase in the amount of \$44,500, from \$340,500 to \$385,000, for project 5453; authorize a budget increase in the amount of \$278,600, from \$256,000 to \$534,600, for project 5469; and authorize the General Manager to execute a construction contract with Schuler Constructors in the amount of \$501,469 for the Michelson Water Recycling Plant Filter Pump Station 2, project 5469, and Dyer Road Wellfield Wells 12 and 13 Roof Modifications, project 5453.

ACTION CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Director Swan said that he attended a Newport Beach Chambers luncheon meeting which he asked to be included in his list of meetings. On MOTION by Withers, seconded and unanimously carried, THE BOARD RATIFIED/APPROVED THE MEETINGS AND EVENTS FOR STEVEN LAMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN, AND JOHN WITHERS AS AMENDED.

VERIFICATIONS OF SUFFICIENT WATER SUPPLY FOR THE WEST ALTON PARCEL AND EL TORO 100-ACRE PARCEL DEVELOPMENTS

Ms. Kellie Welch reported that in February 2016, staff received two requests from the County of Orange to complete Verifications of Sufficient Water Supply (WSV) for the West Alton Parcel and the El Toro 100-Acre Parcel developments located within the former Marine Corps Air Station (MCAS) El Toro Base. Ms. Welch said that on April 15, 2015, the Board approved separate Water Supply Assessments (WSA) for each of the proposed projects. The West Alton project WSA included 970 dwelling units which the County has reduced by 168 to 802 proposed dwelling units. The El Toro project includes 2,103 dwelling units and 2.1 million square feet of retail and office space and one hotel which is consistent with the approved WSA. As required under SB 221, and as part of the tract map approval process for projects including 500 or more dwelling units, the County has requested a WSV be prepared for its West Alton and El Toro projects. The WSVs for these projects are based upon the approved WSAs containing IRWD's determination that a sufficient water supply is available. SB 221 also requires several elements be included in the WSV that are not covered or required in the WSA. These elements are primarily covered in Sections 1(b)(ii), 1(b)(iii) and 1(b)(iv) of the "Detailed Verification" section in each of the attached WSVs. This information, together with the respective WSAs approved by IRWD in 2015, reflects IRWD's confirmation that the project water demands, together with demands from any other developments that have previously received WSVs or will-serve, or other projects that have come to IRWD's attention either through developers or through the respective land use agency approval process, are, in the aggregate, within the demands identified by that WSA. In accordance with this procedure, the attached WSVs are based on the respective WSAs and information contained in the WSVs.

Director Withers reported that this item was reviewed and approved by the Water Resources Policy and Communications Committee on May 12, 2016. On MOTION by Withers, seconded and unanimously carried, **THE BOARD APPROVED THE VERIFICATION OF SUFFICIENT WATER SUPPLY FOR THE WEST ALTON PARCEL DEVELOPMENT AND THE VERIFICATION OF SUFFICIENT WATER SUPPLY FOR THE EL TORO 100-ACRE PARCEL DEVELOPMENT.**

MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONTRACT CHANGE ORDERS AND AMENDMENT NO. 1 TO AGREEMENT WITH ORANGE COUNTY SANITATION DISTRICT FOR INTERIM SOLIDS HANDLING

General Manager Cook reported that construction of the Biosolids Project was awarded to Filanc/Balfour-Beatty (FBB) in March 2013 in the amount of \$163,513,307. The Biosolids Project will provide biosolids digestion, dewatering, energy production, and on-site sludge drying. The project includes excavation for subsurface structures; installation of 3,009 foundation piles; three egg-shaped digesters; a state-of-the-art odor control system; a biogas conditioning system and power generation using micro-turbines; a fats, oil and grease (FOG) receiving station; and new utility services. Mr. Cook said that staff negotiated a two-year time extension of the Orange County Sanitation District (OCSD) lease for Transfer of Wastewater Solids Residuals due to the Biosolids construction extending beyond December 2016.

Executive Director of Engineering and Water Quality Burton reported that staff negotiated with FBB and agreed to the labor and material costs contained in Contract Change Order (CCO) No. 41. The change order contains Secondary Circuit Breakers for Transformers T-15, T-16, and T-1 for a cost of \$254,941.66; fire sprinkler system modifications for a cost of \$168,322.14; fiber optic system modifications for a cost of \$178,879.46; heating water boiler control modifications at a cost of \$71,379.00; concrete surface treatment at a cost of \$68,714.34; additional cameras at the unloading/loading area of the solids handling facility at a cost of \$61,731.96; additional Southern California Edison (SCE) and Southern California Gas modifications at a cost of \$51,238.69; additional potholing due to the electrical realignments at a cost of \$36,706.57; SCADA Control Modifications for the Acid Phase Digesters, Methane Digesters, and Sludge Holding Tank at a cost of \$50,540.23; miscellaneous SCADA, instrumentation, and electrical modifications at a cost of \$130,593.37; and centrifuge pedestal modifications at a cost of \$30,603.14.

Mr. Burton reported on CCO No. 42 includes several items that result in credits to IRWD. CCO No. 42 includes a change in the lightning protection installation for the egg-shaped digesters in the credit amount of <\$97,141.74>; value engineering of chemical pump systems in the credit amount of <\$48,549.90>; centrifuge seismic restraint design costs in the credit amount of <\$24,064.00>; overtime inspection hours from 6/1/2015 through 12/31/2015 in the credit amount of <\$17,710.00>; and deletion of electrical and instrumentation in the credit amount of <\$12,305.45>.

Director Reinhart said that this item was reviewed and approved by the Engineering and Operations Committee on May 17, 2016. On MOTION by Reinhart, seconded and unanimously carried, THE BOARD APPROVED CONTRACT CHANGE ORDER NO. 41 IN THE AMOUNT OF \$1,103,650.56 WITH FILANC/BALFOUR-BEATTY FOR THE MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES, PROJECT NO. 4286; APPROVED CONTRACT CHANGE ORDER NO. 42 IN THE CREDIT AMOUNT OF <\$199,771.09> WITH FILANC/BALFOUR-BEATTY FOR THE MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES, PROJECT NO. 4286; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE AMENDMENT NO. 1 TO THE AGREEMENT FOR TRANSFER OF WASTEWATER SOLIDS RESIDUALS WITH ORANGE COUNTY SANITATION DISTRICT, SUBJECT TO NON-SUBSTANTIVE CHANGES.

HOLT PROPERTY PURCHASE

Executive Director of Water Policy Weghorst reported that IRWD is pursuing the purchase of property in Riverside County that is located within Palo Verde Irrigation District (PVID). Mr. Weghorst said that on April 18, 2016, Bardeen Partners, pursuant to provisions included in its Articles of Incorporation, executed a Purchase and Sale Agreement to purchase the Holt Property comprised of 103 acres which is within the vicinity of the Eaton property that was purchased by IRWD in March 2016. Water tolls are paid on 100 acres of the Property which are enrolled in the existing Metropolitan Water District/PVID Following Program.

Mr. Weghorst said that in the near term, land purchased by IRWD in the PVID service area would continue to be farmed with tenant farm leases which would generate income for IRWD and IRWD would participate in the existing MWD/PVID fallowing program and receive fallowing payments from MWD. He said that in the long term, IRWD-owned land within PVID would continue to be cultivated through tenant farm leases; IRWD could participate in any fallowing and other water conservation programs developed and implemented by MWD and PVID; and IRWD would also work with MWD and Municipal Water District of Orange County to develop mutually-beneficial programs and agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in exchange for water conserved on IRWD-owned lands in PVID.

Mr. Weghorst said that the Purchase Agreement provides for a 40-day due diligence period in which there is an opportunity to conduct any studies, tests and inspections that are deemed necessary prior to the acquisition of the property. He said that Dee Jaspar & Associates (DJA) was retained to oversee the due diligence investigations and to complete a Baseline Property Assessment Report. He said that the due diligence investigations have been completed and to date shows the Holt Property is generally maintained with no recognized onsite environmental conditions. This property is currently planted in alfalfa with 37 acres fallowed per the Fallowing Program. DJA reported that the alfalfa crop appears to be slightly spotty and less dense than growth in an adjacent field. The difference can be due to the different varieties of alfalfa planted, the age of the crop, or farming practices.

Director of Treasury and Risk Management Jacobson reported that staff found no items of record to contest in the initial Preliminary Title Report. While performing the mineral search of the Property, DJA identified a possible illegal transfer in 1995 of approximately 11 acres of property adjacent to two neighboring five-acre home sites. This transfer occurred in 1995. On May 11, 2016, the escrow provider and seller were notified of this finding. He said that if this transfer is found to be legal or is made legal via a parcel map or lot line adjustment, then it would remove about 11 acres from the Holt Property which would reduce the purchase from 103 acres to 92 acres. The seller's broker is working with the seller to resolve this issue.

Director Swan reported that this item was discussed by the Bardeen Property Ad Hoc Committee on May 19, 2016. On MOTION by Swan, seconded and unanimously carried, THE BOARD, SUBJECT TO BARDEEN PARTNERS, INC. APPROVAL OF THE ASSIGNMENT OF THE PURCHASE AGREEMENT TO IRWD, AUTHORIZED THE GENERAL MANAGER TO EXECUTE THE ASSIGNMENT AND ASSUMPTION OF REAL PROPERTY PURCHASE AGREEMENT ACCEPTING THE ASSIGNMENT OF THE PURCHASE AND SALE AGREEMENT FROM BARDEEN PARTNERS, INC.; AUTHORIZED THE TREASURER TO REQUEST AND EXECUTE ANY NECESSARY AMENDMENT TO THE PURCHASE AND SALE AGREEMENT OR AN ADDENDUM TO THE ESCROW INSTRUCTIONS TO EXTEND THE DUE DILIGENCE PERIOD FOR UP TO THIRTY DAYS TO CORRECT THE TITLE ISSUE IDENTIFIED ON THE PROPERTY; FIND THAT ALL MATTERS CURRENTLY IDENTIFIED WITH REGARD TO THE CONDITION OF TITLE, SUBJECT TO CORRECTION OF THE TITLE ISSUE IDENTIFIED ON THE PROPERTY, PHYSICAL CONDITION AND SUITABILITY OF THE PROPERTY FOR THE USES CONTEMPLATED ARE ACCEPTABLE; APPROVED THE ADDITION OF PROJECT 11956 (7305) TO THE FY

2015-16 CAPITAL BUDGET IN THE AMOUNT OF \$1,690,000 FOR THE PURCHASE OF THE PROPERTY; FOUND THAT THE PROPERTY ACQUISITION ONLY IS EXEMPT FROM CEQA; APPROVED THE PROJECT AND AUTHORIZED STAFF TO POST AND FILE THE NOTICES OF EXEMPTION IN ORANGE AND RIVERSIDE COUNTIES; AND, AND AUTHORIZED THE GENERAL MANAGER AND TREASURER AND EACH OTHER OFFICER OF THE DISTRICT, EACH ACTING SINGLY, TO EXECUTE AND DELIVER ANY AND ALL DOCUMENTS, PROGRAM ASSIGNMENTS, CERTIFICATES, INSTRUCTIONS AND INSTRUMENTS NECESSARY OR PROPER FOR CARRYING OUT AND CLOSING THE REAL ESTATE PURCHASE TRANSACTION FOR THE ACQUISITION OF THE PROPERTY, SUBJECT TO CORRECTION OF THE TITLE ISSUE IDENTIFIED ON THE PROPERTY.

MARTIN PROPERTY PURCHASE

Executive Director of Water Policy Weghorst reported that IRWD is pursuing the purchase of an additional property in Riverside County located within Palo Verde Irrigation District (PVID). Mr. Weghorst said that on April 12, 2016, Bardeen Partners, pursuant to provisions included in its Articles of Incorporation, executed a Purchase and Sale Agreement to purchase the Martin Property comprised of 80 acres which is within the vicinity of the Eaton property purchased by IRWD in March 2016. Water tolls are paid on 74 acres of the Property which are enrolled in the existing Metropolitan Water District/PVID Fallowing Program.

Mr. Weghorst said that in the near term, land purchased by IRWD in the PVID service area would continue to be farmed with tenant farm leases which would generate income for IRWD and IRWD would participate in the existing MWD/PVID fallowing program and receive fallowing payments from MWD. He said that in the long term, IRWD-owned land within PVID would continue to be cultivated through tenant farm leases; IRWD could participate in any fallowing and other water conservation programs developed and implemented by MWD and PVID; and IRWD would also work with MWD and Municipal Water District of Orange County to develop mutually-beneficial programs and agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in exchange for water conserved on IRWD-owned lands in PVID.

Mr. Weghorst said that the Purchase Agreement provides for a 40-day due diligence period in which there is an opportunity to conduct any studies, tests and inspections that are deemed necessary prior to the acquisition of the property. He said that Dee Jaspar & Associates (DJA) was retained to oversee the due diligence investigations and to complete a Baseline Property Assessment Report. He said that the due diligence investigations have been completed and to date shows the Martin Property is generally maintained with no recognized onsite environmental conditions. This property is currently planted in Bermuda grass with 25 acres fallowed per the Fallowing Program.

Mr. Weghorst said that a Phase 1 Environmental Site Assessment was performed by subcontractor Advanced Environmental Concepts, Inc. and identified no onsite recognized environmental issues. He said the Assessment identified the existence of a domestic well at the location of an old farmstead and the District will receive a credit from the Seller's proceeds at

close of escrow to formally abandon the well. He said the Assessment also identified a 1.5-acre slough area on the southeast corner of the property that appears to have been used as a dump site for household waste, appliances and railroad ties. He said the seller has agreed to remove these items prior to closing.

Director of Treasury and Risk Management Jacobson reported that staff found no items of record to contest in the initial Preliminary Title Report.

Director Swan reported that this item was discussed by the Bardeen Property Ad Hoc Committee on May 19, 2016. On MOTION by Swan, seconded and unanimously carried, THE BOARD, SUBJECT TO BARDEEN PARTNERS, INC. APPROVAL OF THE ASSIGNMENT OF THE PURCHASE AGREEMENT TO IRWD, AUTHORIZED THE GENERAL MANAGER TO EXECUTE THE ASSIGNMENT AND ASSUMPTION OF REAL PROPERTY PURCHASE AGREEMENT ACCEPTING THE ASSIGNMENT OF THE PURCHASE AND SALE AGREEMENT FROM BARDEEN PARTNERS, INC.; AUTHORIZED THE TREASURER TO REQUEST AND EXECUTE ANY NECESSARY AMENDMENT TO THE PURCHASE AND SALE AGREEMENT OR AN ADDENDUM TO THE ESCROW INSTRUCTIONS FOR THE MARTIN PROPERTY TO ALLOW FOR BUYER ABANDONMENT OF THE WELL WITH A CREDIT FOR THE COST OF THE WELL ABANDONMENT TO BE APPLIED TO THE PURCHASE PRICE; FOUND THAT ALL MATTERS CURRENTLY IDENTIFIED WITH REGARD TO THE CONDITION OF TITLE, PHYSICAL CONDITION AND SUITABILITY OF THE PROPERTY FOR THE USES CONTEMPLATED ARE ACCEPTABLE; APPROVED THE ADDITION OF PROJECT 11955 (7302) TO THE FY 2015-16 CAPITAL BUDGET IN THE AMOUNT OF \$1,261,000 FOR THE PURCHASE OF THE MARTIN PROPERTY; FOUND THAT THE PROPERTY ACQUISITION ONLY IS EXEMPT FROM CEQA; APPROVED THE PROJECT AND AUTHORIZED STAFF TO POST AND FILE THE NOTICES OF EXEMPTION IN ORANGE AND RIVERSIDE COUNTIES; AND AUTHORIZED THE GENERAL MANAGER AND TREASURER AND EACH OTHER OFFICER OF THE DISTRICT, EACH ACTING SINGLY, TO EXECUTE AND DELIVER ANY AND ALL DOCUMENTS, PROGRAM ASSIGNMENTS, CERTIFICATES, INSTRUCTIONS AND INSTRUMENTS NECESSARY OR PROPER FOR CARRYING OUT AND CLOSING THE REAL ESTATE PURCHASE TRANSACTION FOR THE ACQUISITION OF THE PROPERTY.

GENERAL MANAGER'S REPORT

General Manager Cook said he learned of a community issue at the Portola High School in Irvine relative to potential contaminants which could be attributable to recycled water. Mr. Cook said he has been in contact with staff at the Irvine Unified School District and will be tracking this issue. Director Withers commented that he believed there was confusion with the terminology as the nursery had used irrigation water which was recycled, and may have been gravity drained to the high school site.

Mr. Cook reported on the drought regulation revisions by the State Board which are now supply based and are shifting control to handle the drought by self-certification. He further

complimented Director Fiona Sanchez on her efforts. In response to Director Reinhart's comment on how to "cement in" conservation measures, Director Sanchez briefly described a few of the measures taken and said that an item will be submitted to the Water Resources and Policy Committee to discuss the new conservation framework going forward.

Mr. Cook reported on his vacation plans next week and that he will be appointing Executive Director of Clary to act on his behalf.

DIRECTORS' COMMENTS

Director Withers said he attended his regular monthly meetings.

Director Swan reported on his attendance at an ACWA conference, a WACO Planning meeting, a SAWPA Watershed meeting representing the Newport Bay Watershed Executive Committee, a Newport Coastal Coalition meeting, a Southern California Water Dialogue meeting, and a MWDOC/OCWD Joint Committee meeting.

Director Swan further commented on tonight's conservation proclamation received from MWDOC and said he believed that the customers should also be complimented on their conservation efforts.

Director Reinhart reported on his attendance at an ACWA conference, a MWDOC Board meeting, and an Orange County Water Summit meeting.

Director Matheis reported on her attendance at an ACWA conference, an Orange County Water Summit meeting, and an Irvine Historic Museum event which she attended with Director Swan.

CLOSED SESSION

President Matheis said that the following Closed Session would be held:

Conference with Legal Counsel relative to anticipated litigation- Government Code Section 54956.9(d)(2) – significant exposure to litigation (one potential case), and Government Code Section 54956.9(d)(4) initiation of litigation (one potential case)

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Reinhart, Withers, Swan, and Matheis present. President Matheis said that there was no action to report.

ADJOURNMENT

There being no further business, President Matheis adjourned the meeting.

APPROVED and SIGNED this 27th day of June, 2016.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone